UNION STATION
LOS ANGELES

INITIAL STUDY FOR REHABILITATION AND REUSE

ARCHIVAL RESEARCH

UNION STATION
LOS ANGELES, CALIFORNIA

INITIAL STUDY FOR
REHABILITATION AND REUSE:
ARCHIVAL RESEARCH

PREPARED FOR CATELLUS DEVELOPMENT CORPORATION
HARDY HOLZMAN PFEIFFER ASSOCIATES
AUGUST 1991

TABLE OF CONTENTS

I. INTRODUCTION

INTRODUCTION

This volume of archival research for Los Angeles' Union Station and its Appendix were prepared as supplements to the **Initial Study for Rehabilitation and Reuse: Survey of Conditions.** Our purpose in assembling this information is twofold. First, it provides a readily accessible source of historic information to foster appreciation of the station's unique architectural features and brings together shared knowledge of the station's development. Secondly, it provides important architectural information through its photographs, drawings, and articles of the many technical and artistic aspects of the station - some of which have been lost or damaged during the station's fifty years of service. Reference to these documents will facilitate replacement of historic fixtures and identification of historic materials and suppliers.

The ongoing research effort for the station's rehabilitation is greatly helped by its consistent occupancy and use as a train station. While over the years train companies have merged, operating companies been replaced, and corporate identities changed, the files for the station itself have been maintained at its original location, and will provide specific technical information for future researchers.

Hardy Holzman Pfeiffer Associates would like to acknowledge the enthusiastic assistant of the Catellus Development Corporation in preparing this material, particularly Tom Buckley, Delia Martin, Les Graham and Tom McCue; the Los Angeles Public Library's staff; the Security Pacific National Bank Photograph Collection and Carolyn Kozo; UCLA Graduate School of Architecture and Urban Planning Library; the Department of Special Collections at the UCLA Research Library; Alan Jutzi at the Huntington Library; and David Streatfield, Landscape Historian at the University of Washington, all for their wide range of resources and reference material.

UST:archival

II. ARCHIVAL DRAWINGS

LIST OF ORIGINAL DRAWINGS
LOS ANGELES UNION STATION

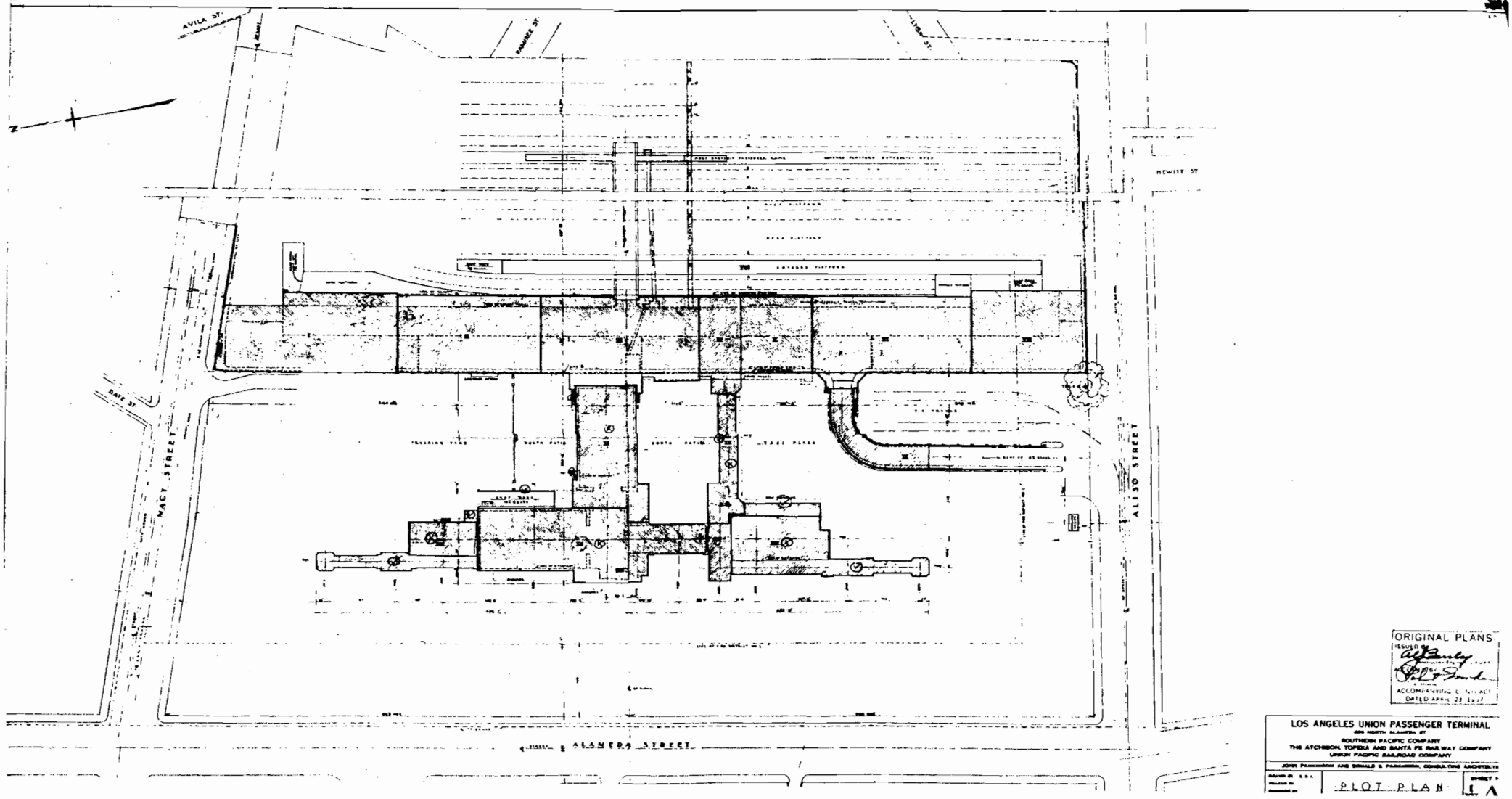
SECTION	SHEET	TITLE
Architectural Drawings		
I TO XV	A - 1a	PLOT PLAN
XI TO XV	A - 1a	STREET FLOOR PLAN OF PASSENGER FACILITIES
IX " XV	A - 1c	ROOF PLAN
IX " XV	A - 1d	FRONT ALAMEDA STREET ELEVATION
XI	A - 2	BASEMENT PLAN - WAITING ROOM
"	A - 3	MAIN & MECH FLOOR PLANS - WAITING RM - DOOR & WINDOW SCHE
"	A - 4	ELEVATIONS
"	A - 5	SECTIONS & DETAILS
"	A - 6	CEIL - PLAN - ELEV & DETAILS - WAITING ROOM
"	A - 7	WINDOW & DOOR DETAILS - WAITING ROOM
"	A - 8	GENERAL DETAILS WAITING ROOM
"	A - 9	DETAILS OF PASSAGE
"	A - 10	MISCELLANEOUS DETAILS
XII	A - 2	BASEMENT PLAN
"	A - 3	MAIN FLOOR PLAN - DOOR & WINDOW SCHEDULES
"	A - 4	WEST ELEVATION
"	A - 5	EAST ELEVATION
"	A - 6	NORTH & SOUTH ELEVATIONS
"	A - 7	SECTIONS & INTERIOR ELEVATIONS
"	A - 8	SECTIONS & INTERIOR ELEVATIONS
"	A - 9	TOWER DETAILS
"	A - 10	MISCL & EXPANSION JOINT DETAILS
"	A - 11	DET - NO & SO WALLS - MAIN CONCOURSE
"	A - 12	DETAILS FOR MAIN ENTRANCE
"	A - 13	DETAILS FOR ARCADE ENTRANCE
"	A - 14	MAIN ENTRANCE & ARCADE ENTRANCE DETAILS
"	A - 15	WINDOWS & DOOR DET - WEST WALL - MAIN CONCOURSE
"	A - 16	WINDOW DETAILS EAST & WEST WALLS MAIN CONCOURSE
"	A - 17	ARCADE & PASSAGE CEILING DETAILS
"	A - 18	CEILING & TRUSS DETAILS - MAIN CONCOURSE
"	A - 19	CEILING DETAILS - VESTIBULE & MAIN CONCOURSE
"	A - 20	STAIR DETAILS
"	A - 21	MARQUISE & LADDER DETAILS
"	A - 22	MISCELLANEOUS DETAILS
"	A - 23	" "
XIII	A - 2	BASEMENT PLAN
"	A - 3	MAIN & SECOND FL - PLANS - SCHEDULES - INT - ELEV - DET'S
"	A - 4	ELEVATIONS
"	A - 5	SECTIONS & DETAILS
"	A - 6	SASH DETAILS & MOULDINGS
"	A - 7	DRIVEWAY ENTRANCE DETAILS
"	A - 8	END PAVILION & TOILET STALL DETAILS

SECTION	SHEET	TITLE
Architectural Drawings		
XIV	A - 2	BASEMENT PLAN & STAIR DETAILS
"	A - 3	MAIN & UPPER FLOOR PLANS
"	A - 4	ELEVATIONS
"	A - 5	SECTIONS
"	A - 6	RESTAURANT - STAIR & BALCONY DETAILS
"	A - 7	RESTAURANT - ENTRANCE DETAILS
"	A - 8	RESTAURANT - WINDOW DETAILS
"	A - 9	MISCELLANEOUS DETAILS
"	A - 10	DOOR & WINDOW SCHEDULES
"	A - 11	RESTAURANT LOBBY - CEILING DETAILS
"	A - 12	ARCADE & END PAVILLION DETAILS
XV	A - 2	PLANS & SECTIONS
"	A - 3	ELEVATIONS & DETAILS
III	2	STREET LEVEL FLOOR PLAN
"	6	SECTIONS
"	50	REFLECTED CEILING PLAN
"	51	DOOR & SASH DETAILS - TRAIN CONCOURSE
"	52	WALL ELEVATIONS - TRAIN CONCOURSE
"	53	TUNNEL ENTRANCE
"	56	LOGGIA DETAILS - LINE "J"
STRUCTURAL		
XII	S - 1	MAIN CONCOURSE - UNIT E - BASEMENT & FOOTING PLAN
"	S - 2	MAIN CONCOURSE - UNIT E - FIRST FLOOR FRAME PLAN
"	S - 3	MAIN CONCOURSE & VESTIBULE - UNIT E - COL & FOOT SCHEDULE
"	S - 4	MAIN CONCOURSE UNIT E - FOOTINGS
"	S - 5	MAIN CONCOURSE UNIT E - FOOTINGS
"	S - 6	MAIN CONCOURSE UNIT E - STAIRS & FLOOR SLAB
"	S - 7	MAIN CONCOURSE UNIT E - BEAM DETAILS
"	S - 8	MAIN CONCOURSE UNIT E - BEAM DETAILS
"	S - 9	MAIN CONCOURSE UNIT E - MAIN ENTRANCE DETAILS
"	S - 10	MAIN CONCOURSE UNIT E - NORTH WALL ELEV & DETAILS
"	S - 11	MAIN CONCOURSE UNIT E - EAST WALL ELEV & DETAILS
"	S - 12	MAIN CONCOURSE UNIT E - WEST WALL ELEV & DETAILS
"	S - 13	MAIN CONCOURSE UNIT E - SOUTH WALL ELEV & DETAILS
"	S - 14	VESTIBULE UNIT E - NORTH WALL ELEV & DETAILS
"	S - 16	POUR STOPS
"	S - 17	TOWER FRAMING & DETAILS
"	S - 18	TOWER UNIT E - TOWER ROOF & BEAMS
"	S - 19	ARCADE UNIT G - ROOF FRAMING PLAN
"	S - 20	ARCADE UNIT G - ELEVATIONS & SECTION
"	S - 21	ARCADE UNIT G - FLOOR & ROOF BEAMS
"	S - 22	ARCADE UNIT G - FOOTINGS
"	S - 31	MAIN CONCOURSE - UNIT E - EAST & WEST WALL ELEV
"	S - 32	MAIN CONCOURSE - UNIT E - ROOF FRAME - MAIN ENTRANCE
"	S - 33	MAIN CONCOURSE - UNIT E - NORTH WALL FRAME
"	S - 34	MAIN CONCOURSE - UNIT E - TYP EAST & WEST WALL DET
"	S - 35	MAIN CONCOURSE - UNIT E - SOUTH WALL FRAME

SECTION	SHEET	TITLE
Architectural Drawings		
"	S - 36	VESTIBULE - UNIT E - EAST & WEST WALL ELEV
"	S - 37	MAIN CONCOURSE - UNIT E - ROOF PLAN & DETAILS
"	S - 38	MAIN CONCOURSE - UNIT E - HORIZONTAL TRUSS
"	S - 39	MAIN CONCOURSE - UNIT E - VESTIBULE CEIL - FRAME
"	S - 40	MAIN CONCOURSE - UNIT E - VESTIBULE CEIL - DETAIL
"	S - 41	MAIN CONCOURSE - UNIT E - TRUSS "A"
"	S - 42	MAIN CONCOURSE - UNIT E - TRUSS "B"
"	S - 43	MAIN CONCOURSE - UNIT E - TRUSS "C"
"	S - 44	TOWER - UNIT F - FRAME - FOOTING TO 4TH FLOOR
"	S - 45	TOWER - UNIT F - FRAME - 4TH FLOOR TO ROOF
"	S - 46	TOWER - UNIT F - ROOF TRUSS
XIII	S - 1	NORTH WING - FOUNDATION PLAN
"	S - 2	NORTH WING - FIRST & SECOND FLOOR FRAMING
"	S - 3	NORTH WING - SIDE WALLS & DETAILS
"	S - 4	NORTH WING - END WALLS & DETAILS
"	S - 5	NORTH WING - STRUCTURAL STEEL
"	S - 6	NORTH WING - STAIR DETAILS
III	60	LONGITUDINAL SECTION P - THRU PASSAGE
"	61	PLAN SECTION P - FOUNDATION DETAILS
"	62	BEAM & SLAB DETAILS SECTION P
"	63	WALL & STAIR DETAILS SECTION P
"	64	ROOF SLAB & DETAILS SECTION P
"	65	COLUMN SCHEDULE DETAILS SECTION P

UST:X12

ALAMEDA STREET ELEVATION

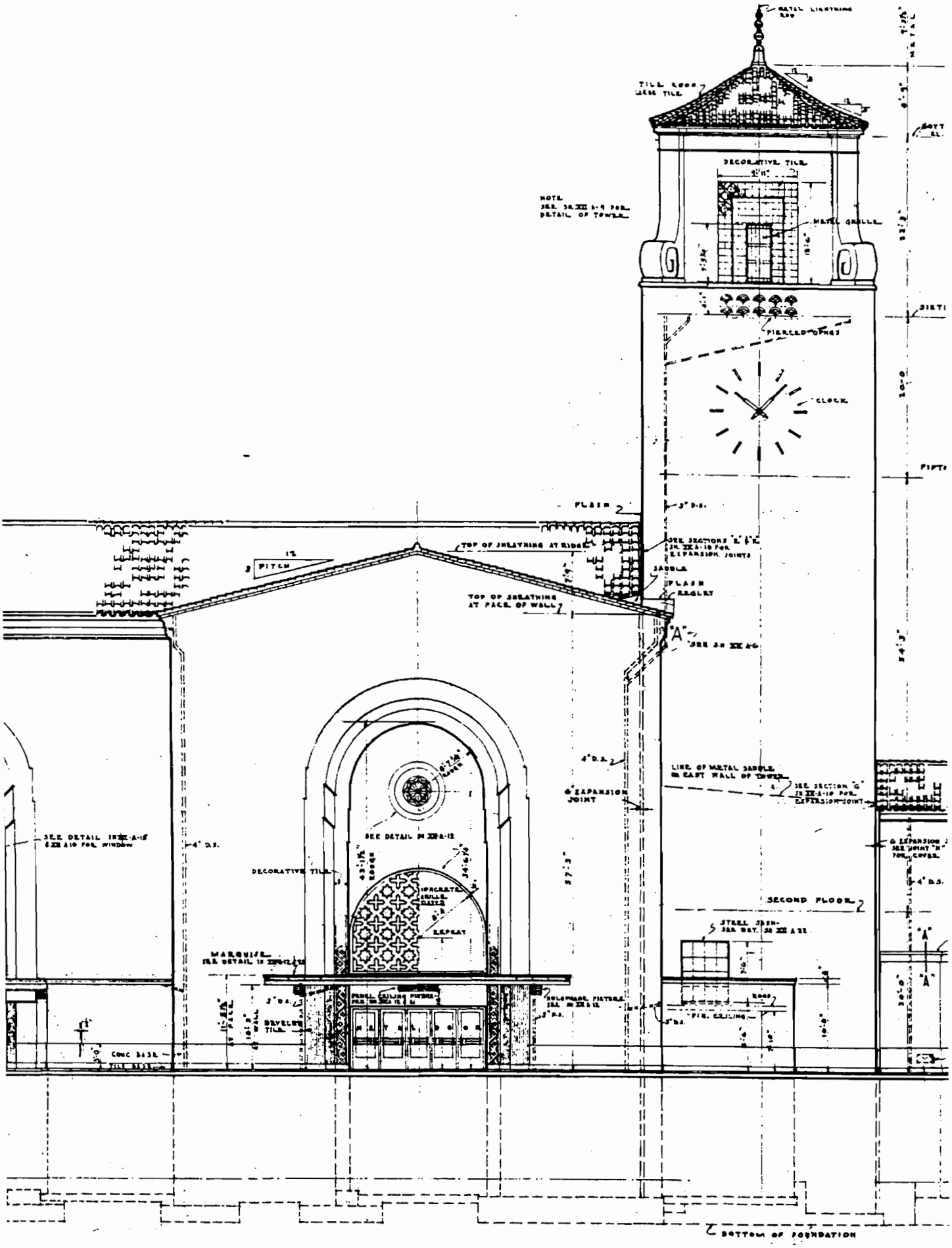


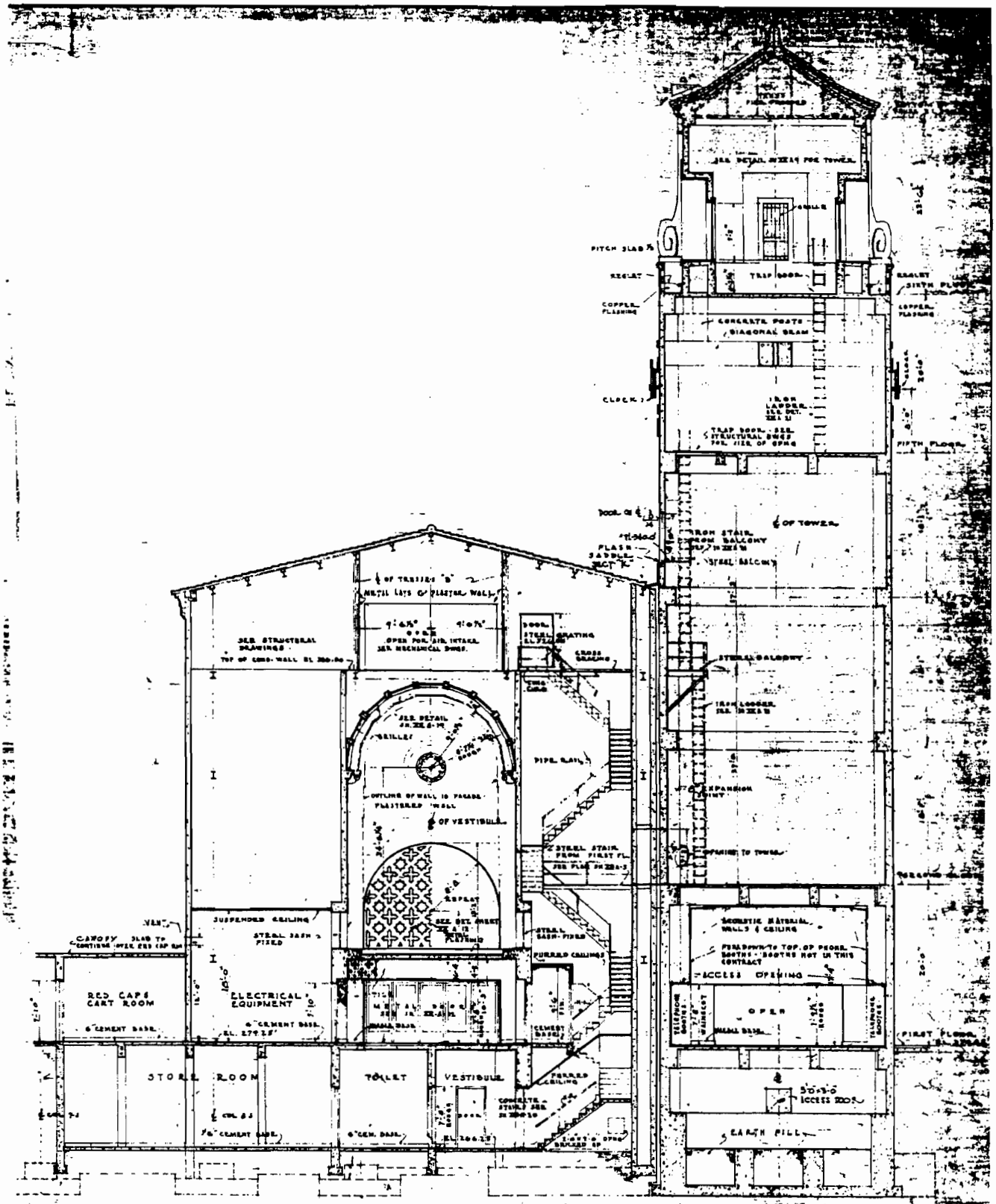
ORIGINAL PLANS
ISSUED BY
ACCOMPANYING CERTIFICATE
DATED APRIL 23 1937

LOS ANGELES UNION PASSENGER TERMINAL
400 NORTH ALAMEDA ST
SOUTHERN PACIFIC COMPANY
THE ATCHISON, TOPEKA AND SANTA FE RAILWAY COMPANY
UNION PACIFIC RAILROAD COMPANY
JOHN PARKINSON AND DONALD B. PARKINSON, CONSULTING ARCHITECTS

PLOT PLAN

SHEET NO. 1 A

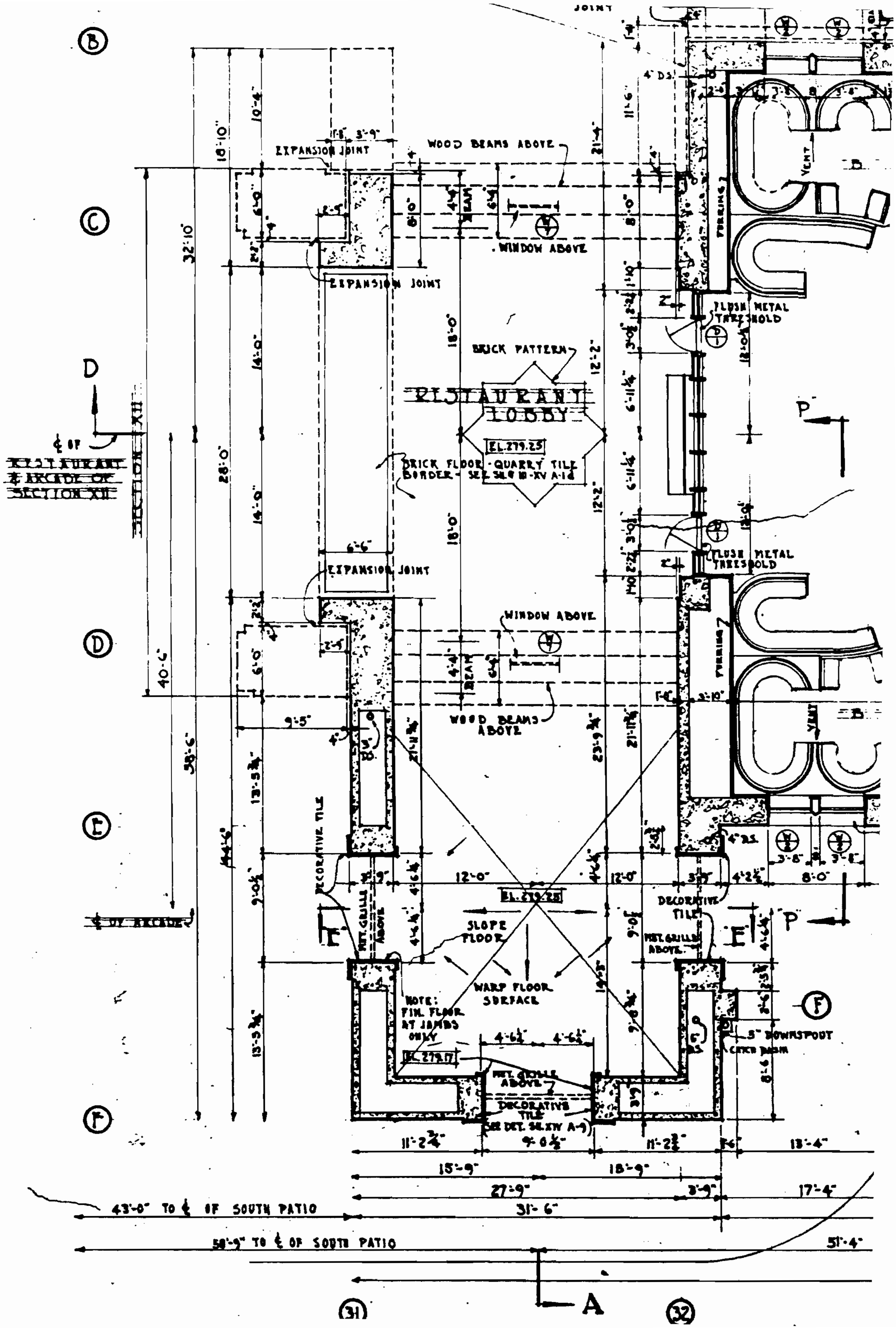

DECORATIVE TILE
PIERCED OPNGS
CLOCK
FLASH
TOP OF SHEATHING AT RIDGE
PITCH
TOP OF SHEATHING AT FACE OF WALL
SADDLE
FLASH REGLET
"A"
4" D.S.
6" EXPANSION JOINT
LINE OF METAL SADDLE IN EAST WALL OF TOWER
SECOND FLOOR
DECORATIVE TILE
REPEAT
MARQUISE
CONC BASE
BOTTOM OF FOUNDATION



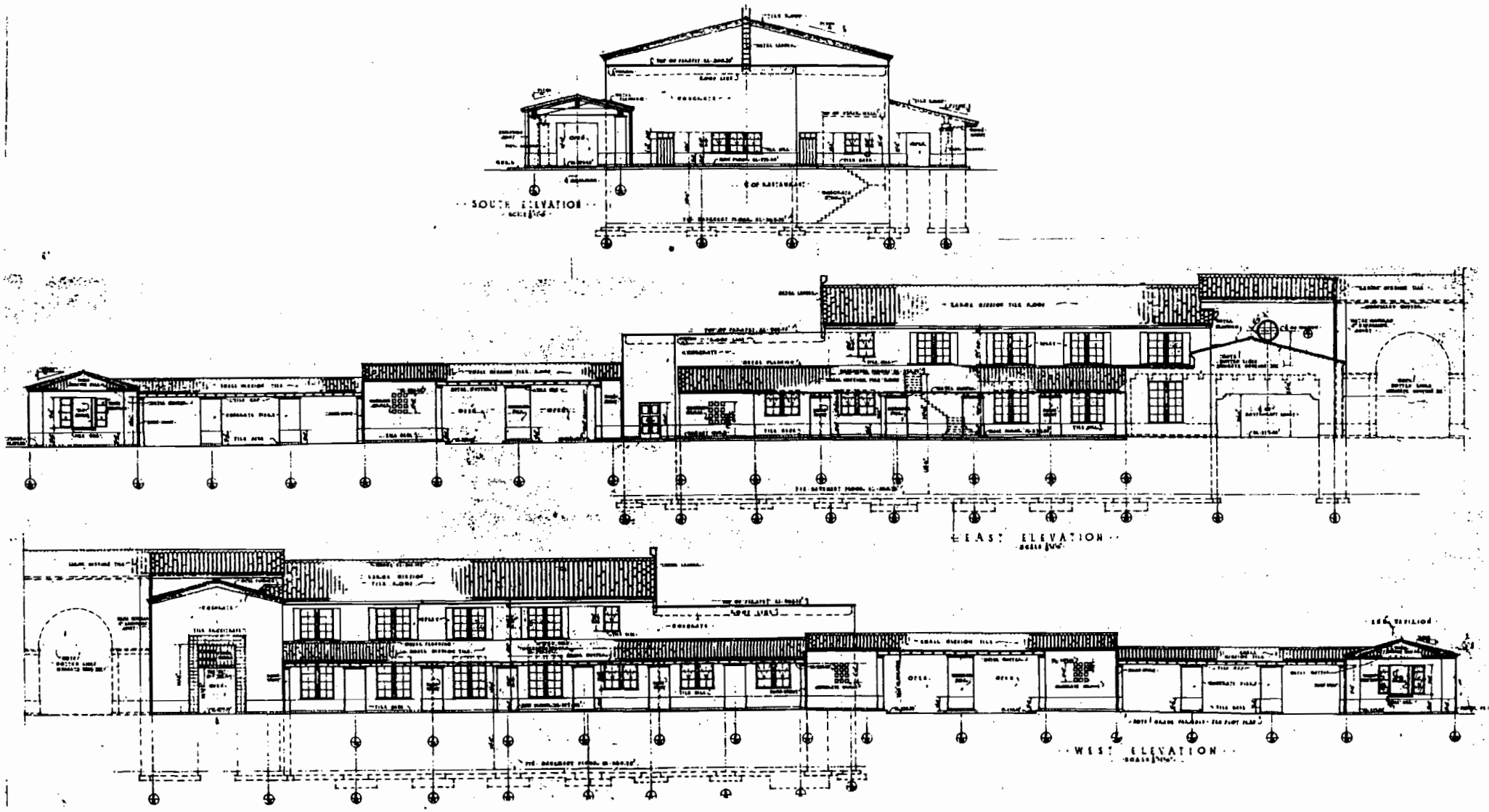
SECTION 'F-F' THRU OUTER VESTIBULE - STAIR & TOWER

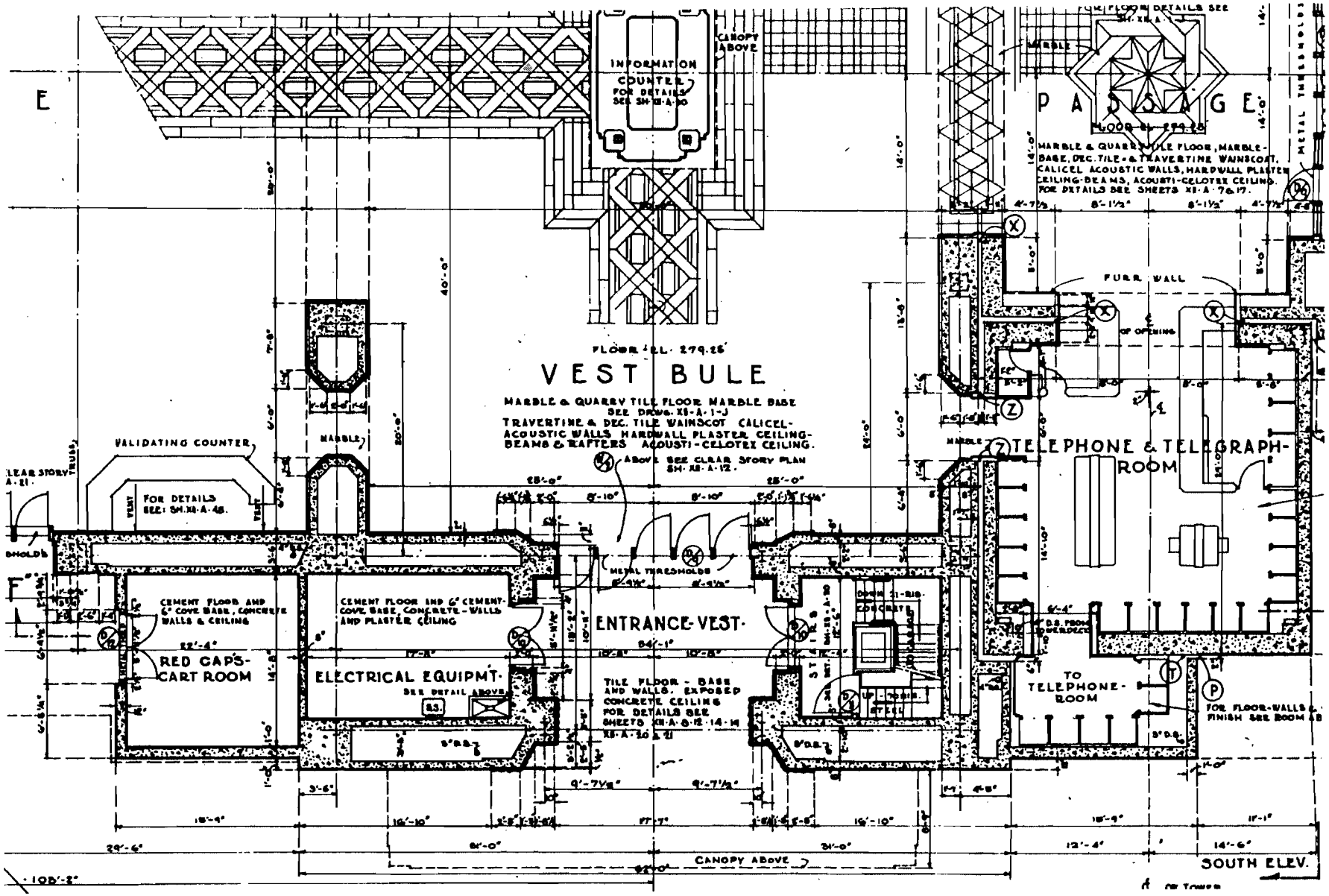
(LOOKING EAST)

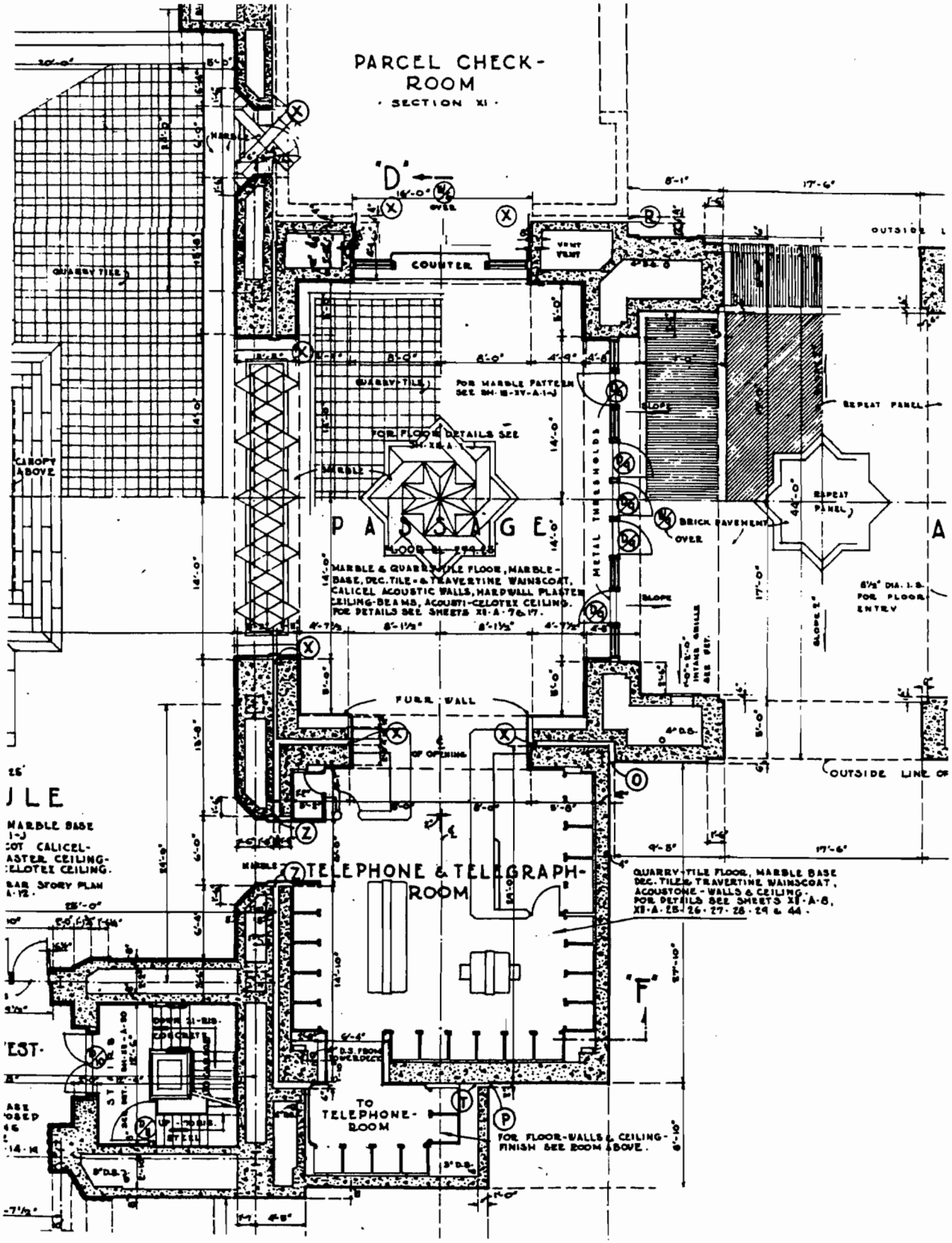
NOTE—CONTRACTOR MUST VERIFY ALL DIMENSIONS AT THE BUILDING

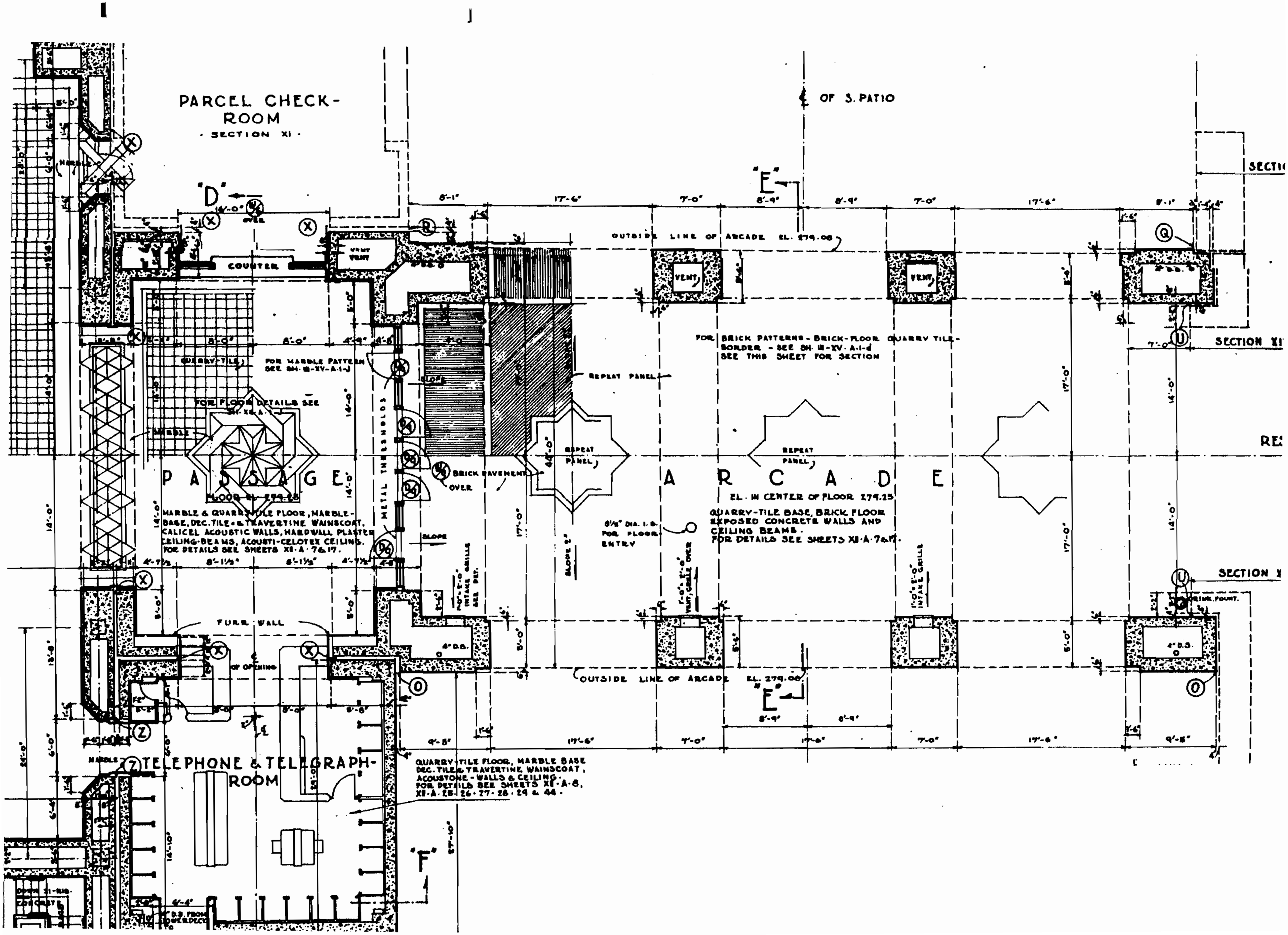


RESTAURANT LOBBY
EL. 279.25
BRICK PATTERN
BRICK FLOOR - QUARRY TILE BORDER - SEE SHT III-XV A-14
WOOD BEAMS ABOVE
WINDOW ABOVE
EXPANSION JOINT
FLUSH METAL THRESHOLD
FURRING
VENT
DECORATIVE TILE
MET. GRILLE ABOVE
SLOPE FLOOR
WARP FLOOR SURFACE
NOTE: FIN. FLOOR AT JAMBS ONLY
EL. 279.17
DECORATIVE TILE SEE DET. SH. XIV A-9
5" DOWNSPOUT
CATCH BASIN
℄ OF RESTAURANT & ARCADE OF SECTION XII
SECTION XII
℄ OF ARCADE
43'-0" TO ℄ OF SOUTH PATIO
58'-9" TO ℄ OF SOUTH PATIO
31'-6"
27'-9"
15'-9"
18'-9"
11'-2¾"
9'-0½"
13'-4"
17'-4"
51'-4"

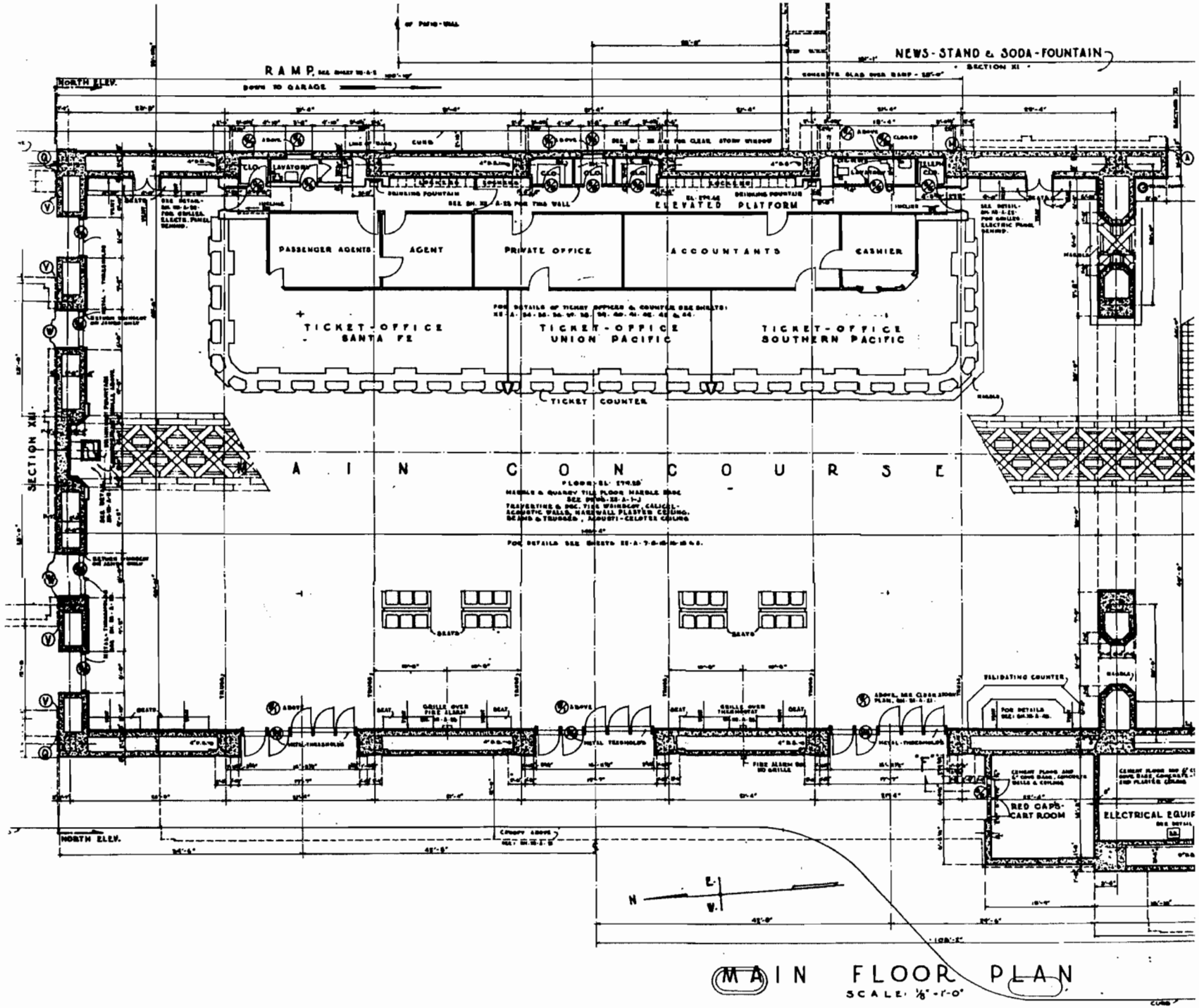

SOUTH ELEVATION
EAST ELEVATION
WEST ELEVATION


INFORMATION COUNTER
FOR DETAILS SEE SH. X8-A-30
CANOPY ABOVE
PASSAGE
FLOOR EL. 279.25
MARBLE & QUARRY TILE FLOOR, MARBLE-BASE, DEC. TILE & TRAVERTINE WAINSCOT, CALICEL ACOUSTIC WALLS, HARDWALL PLASTER CEILING-BEAMS, ACOUSTI-CELOTEX CEILING. FOR DETAILS SEE SHEETS X8-A-16 & 17.
FURR WALL
VEST BULE
MARBLE & QUARRY TILE FLOOR MARBLE BASE SEE DRWG. X8-A-1-J
TRAVERTINE & DEC. TILE WAINSCOT CALICEL-ACOUSTIC WALLS HARDWALL PLASTER CEILING-BEAMS & RAFTERS ACOUSTI-CELOTEX CEILING.
ABOVE SEE CLEAR STORY PLAN SH. X8-A-12.
VALIDATING COUNTER
FOR DETAILS SEE SH. X8-A-48.
MARBLE
TELEPHONE & TELEGRAPH-ROOM
CEMENT FLOOR AND 6" COVE BASE, CONCRETE WALLS & CEILING
RED CAPS-CART ROOM
CEMENT FLOOR AND 6" CEMENT-COVE BASE, CONCRETE-WALLS AND PLASTER CEILING
ELECTRICAL EQUIPMT.
SEE DETAIL ABOVE
ENTRANCE-VEST.
METAL THRESHOLDS
TILE FLOOR - BASE AND WALLS, EXPOSED CONCRETE CEILING FOR DETAILS SEE SHEETS X8-A-8-12-14-16 X8-A-30 & 31
TO TELEPHONE-ROOM
FOR FLOOR-WALLS & FINISH SEE ROOM
CANOPY ABOVE
SOUTH ELEV.


PARCEL CHECK-
ROOM
· SECTION XI ·
"D"
COUNTER
VENT
FLUE
QUARRY TILE
MARBLE
FOR MARBLE PATTERN
SEE SH. XI-IV-A-1-J
FOR FLOOR DETAILS SEE
SH. XI-A
CANOPY
ABOVE
P A S S A G E
FLOOR EL. 254.25
MARBLE & QUARRY TILE FLOOR, MARBLE-
BASE, DEC. TILE & TRAVERTINE WAINSCOAT,
CALICEL ACOUSTIC WALLS, HARDWALL PLASTER
CEILING-BEAMS, ACOUSTI-CELOTEX CEILING.
FOR DETAILS SEE SHEETS XI-A-16 & 17.
METAL THRESHOLDS
SLOPE
BRICK PAVEMENT
OVER
REPEAT PANEL
8½" DIA. I.S.
FOR FLOOR
ENTRY
SLOPE 2"
OUTSIDE LINE OF
FURR WALL
TELEPHONE & TELEGRAPH-
ROOM
QUARRY-TILE FLOOR, MARBLE BASE
DEC. TILE & TRAVERTINE WAINSCOAT,
ACOUSTONE - WALLS & CEILING -
FOR DETAILS SEE SHEETS XI-A-8,
XI-A-25-26-27-28-29 & 44.
"F"
TO
TELEPHONE-
ROOM
FOR FLOOR-WALLS & CEILING-
FINISH SEE ROOM ABOVE.

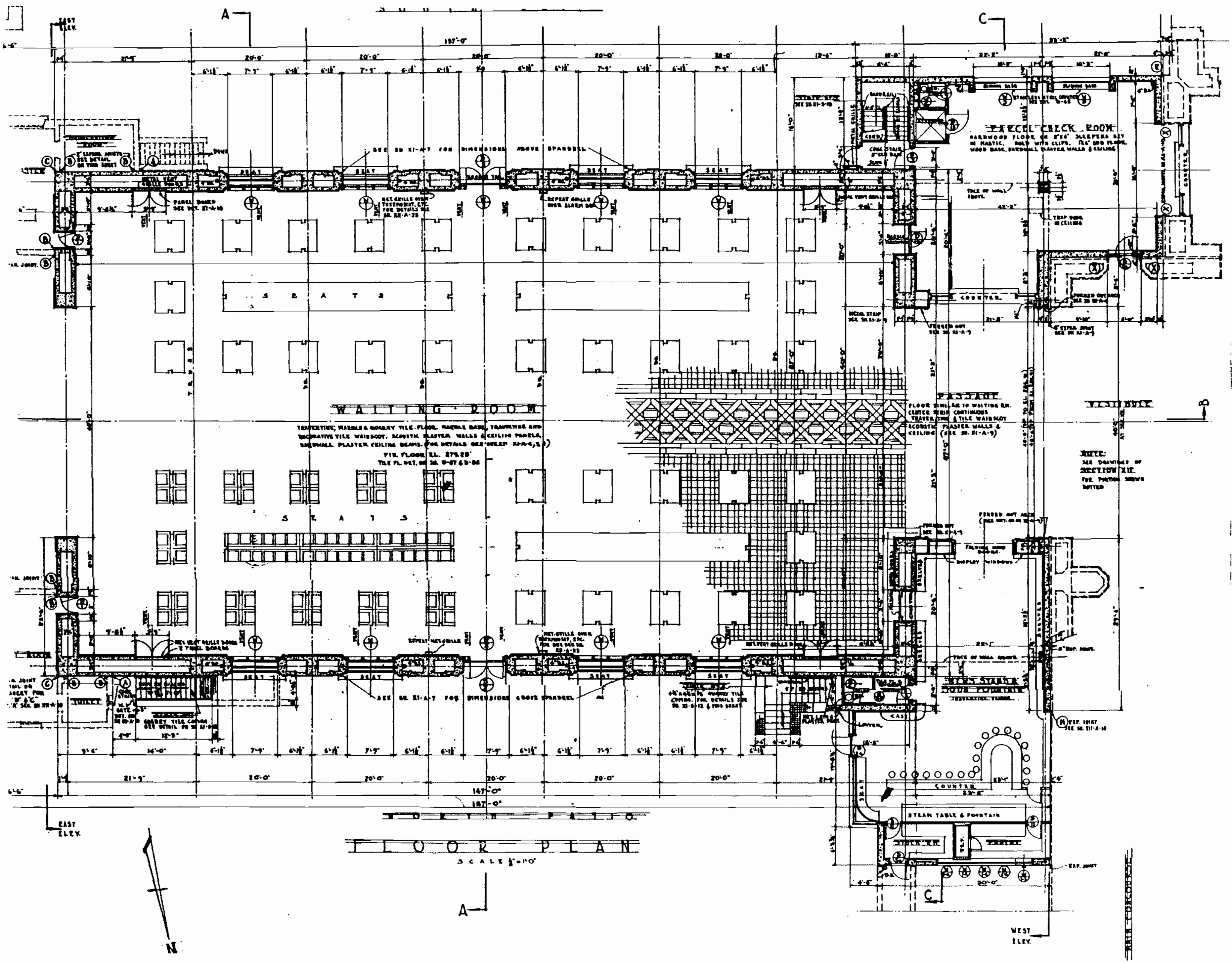


PARCEL CHECK-ROOM
· SECTION XI ·
℄ OF S. PATIO
"D"
"E"
COUNTER
OUTSIDE LINE OF ARCADE EL. 279.00
VENT
FOR BRICK PATTERNS - BRICK-FLOOR QUARRY TILE-BORDER - SEE SH-III-XV-A-1-d
SEE THIS SHEET FOR SECTION
SECTION XI
QUARRY-TILE
FOR MARBLE PATTERN SEE SH-III-XV-A-1-J
FOR FLOOR DETAILS SEE SH-XII-A-1-J
REPEAT PANEL
MARBLE
METAL THRESHOLDS
BRICK PAVEMENT OVER
P A S S A G E
A R C A D E
FLOOR EL. 279.28
EL. IN CENTER OF FLOOR 279.25
MARBLE & QUARRY-TILE FLOOR, MARBLE-BASE, DEC. TILE & TRAVERTINE WAINSCOAT, CALICEL ACOUSTIC WALLS, HARDWALL PLASTER CEILING-BEAMS, ACOUSTI-CELOTEX CEILING. FOR DETAILS SEE SHEETS XI-A-7 & 17.
QUARRY-TILE BASE, BRICK FLOOR EXPOSED CONCRETE WALLS AND CEILING BEAMS. FOR DETAILS SEE SHEETS XI-A-7 & 17.
FOR FLOOR ENTRY
SLOPE
INTAKE GRILLE
FURR WALL
OUTSIDE LINE OF ARCADE EL. 279.00
"F"
TELEPHONE & TELEGRAPH-ROOM
QUARRY-TILE FLOOR, MARBLE BASE DEC. TILE & TRAVERTINE WAINSCOAT, ACOUSTONE-WALLS & CEILING. FOR DETAILS SEE SHEETS XI-A-8, XI-A-25-26-27-28-29 & 44.

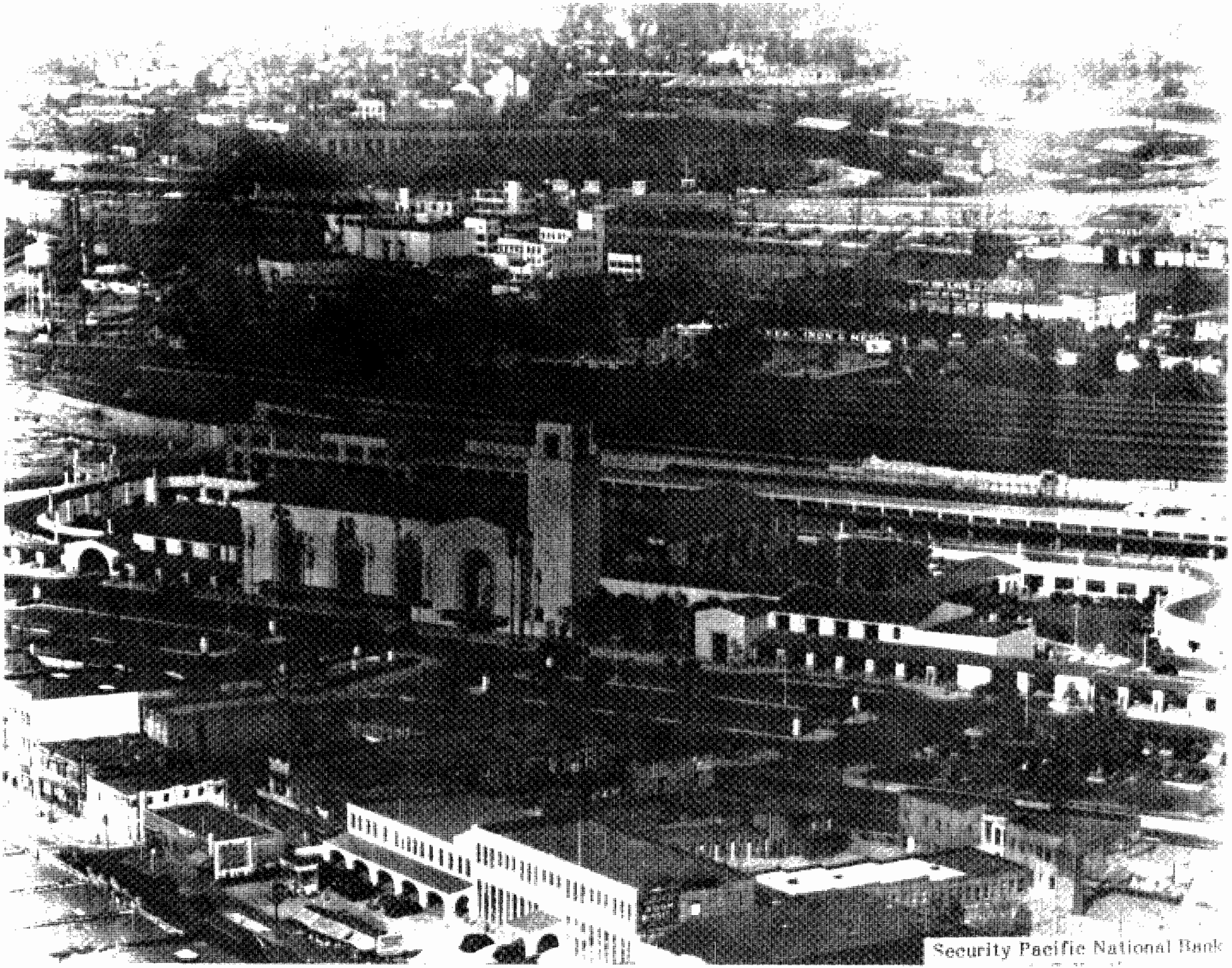


MAIN FLOOR PLAN

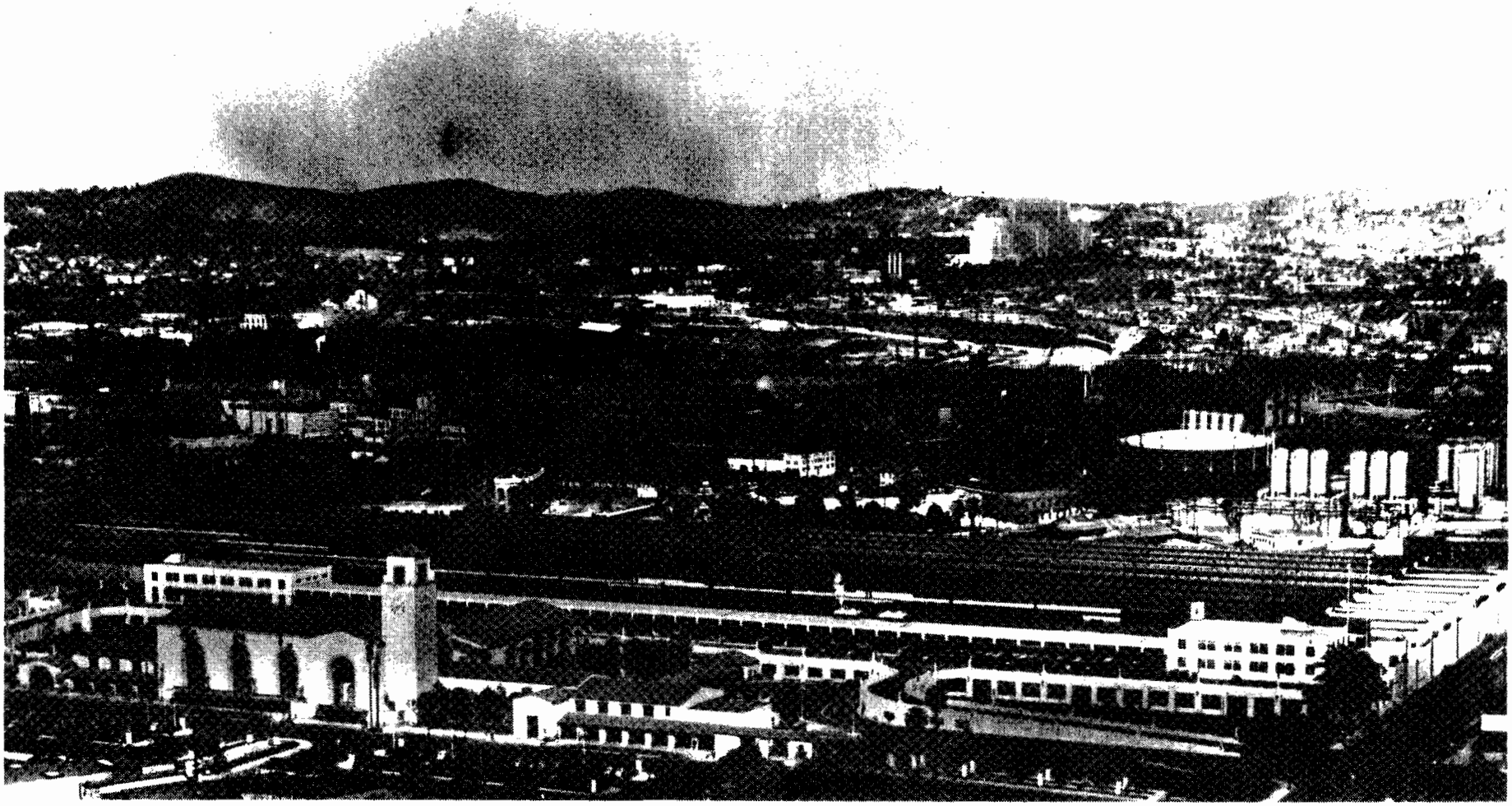
SCALE: 1/8"-1'-0"


WAITING ROOM
SEATS
PARCEL CHECK ROOM
PASSAGE
VESTIBULE
COUNTER
STEAM TABLE & FOUNTAIN
NOTE:
SEE DRAWINGS OF SECTION XII FOR PORTION SHOWN DOTTED
FLOOR PLAN
SCALE 1/8"=1'-0"
EAST ELEV.
WEST ELEV.
N

III. PHOTOGRAPHS



Security Pacific National Bank



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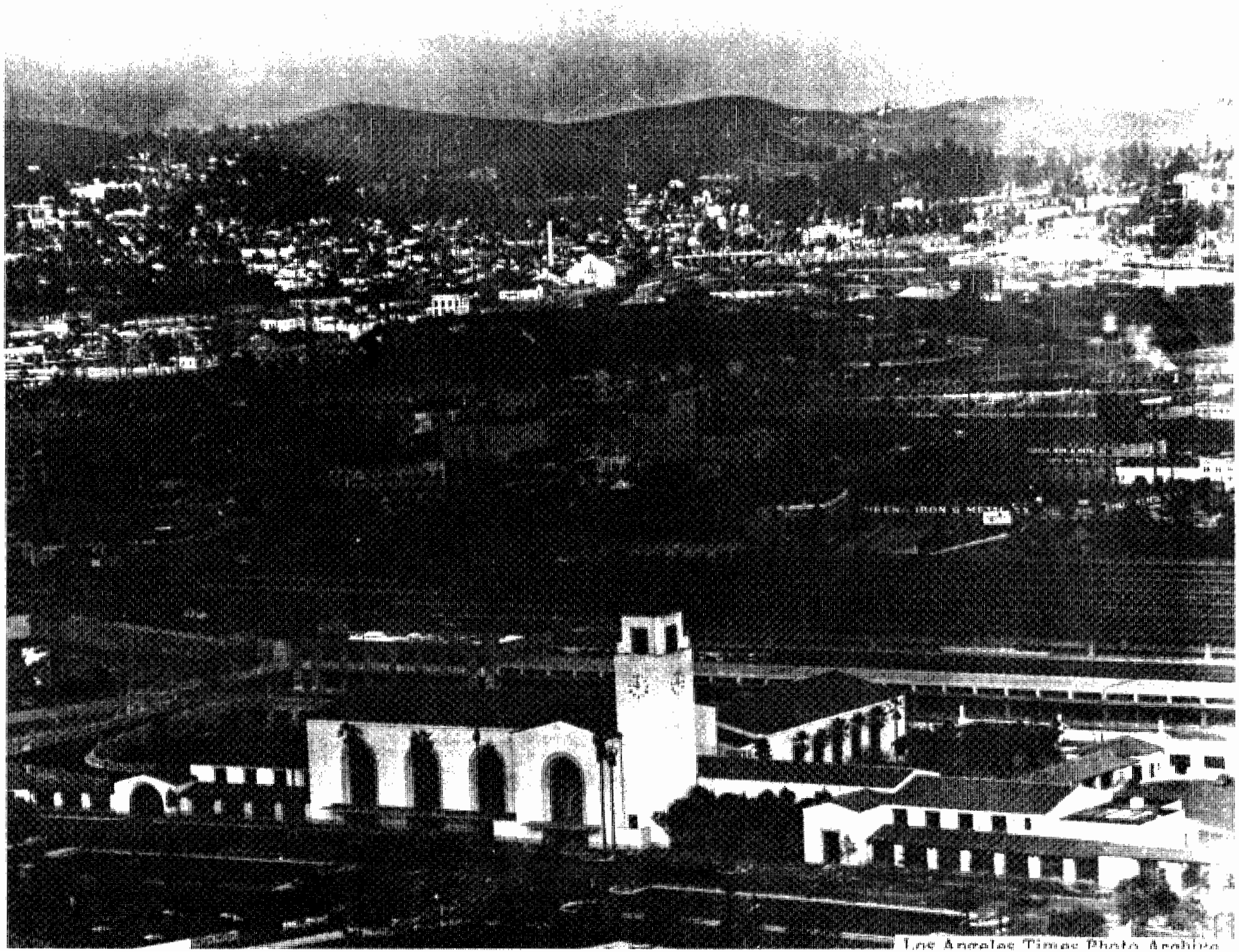
Photograph Collection



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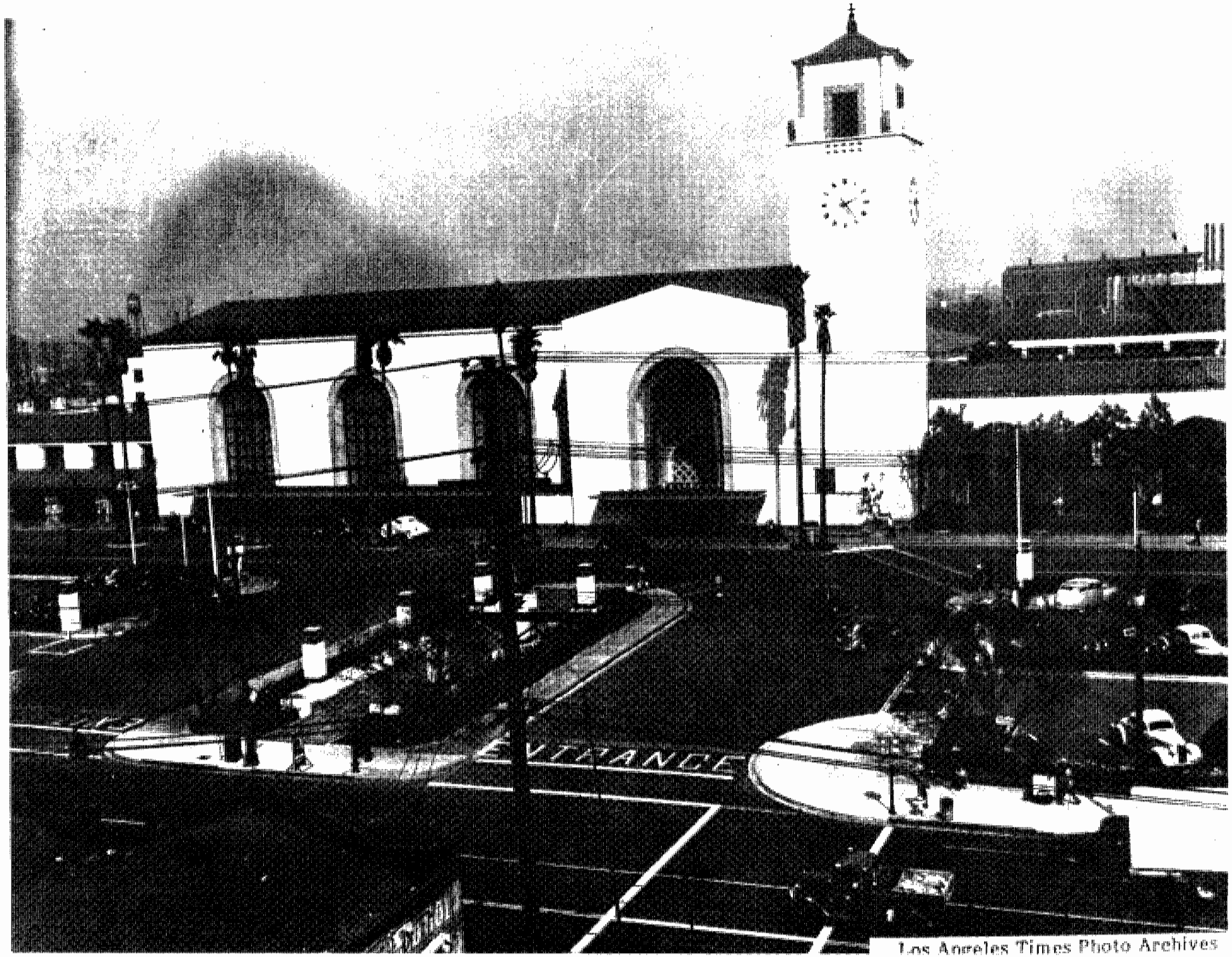

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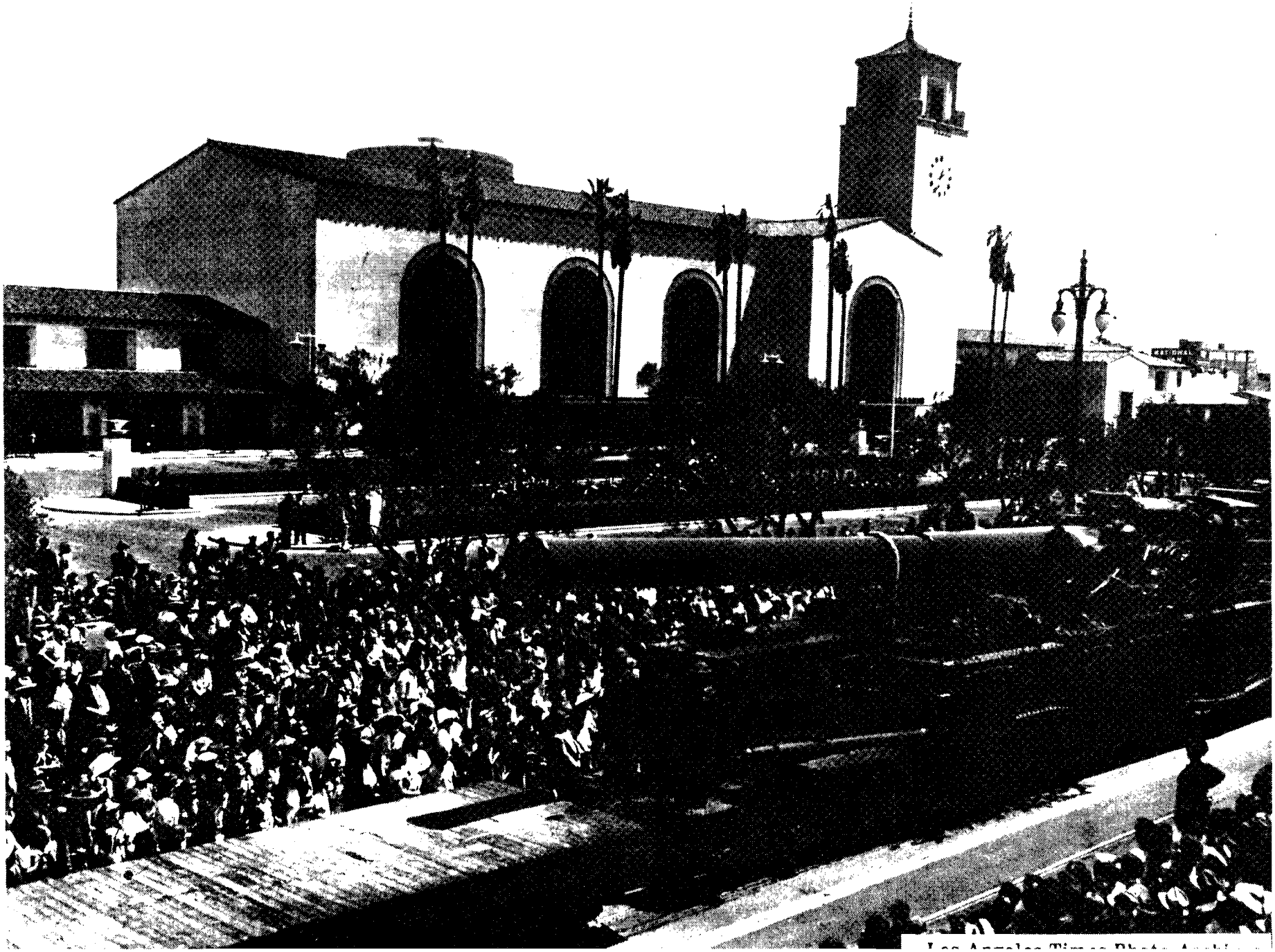

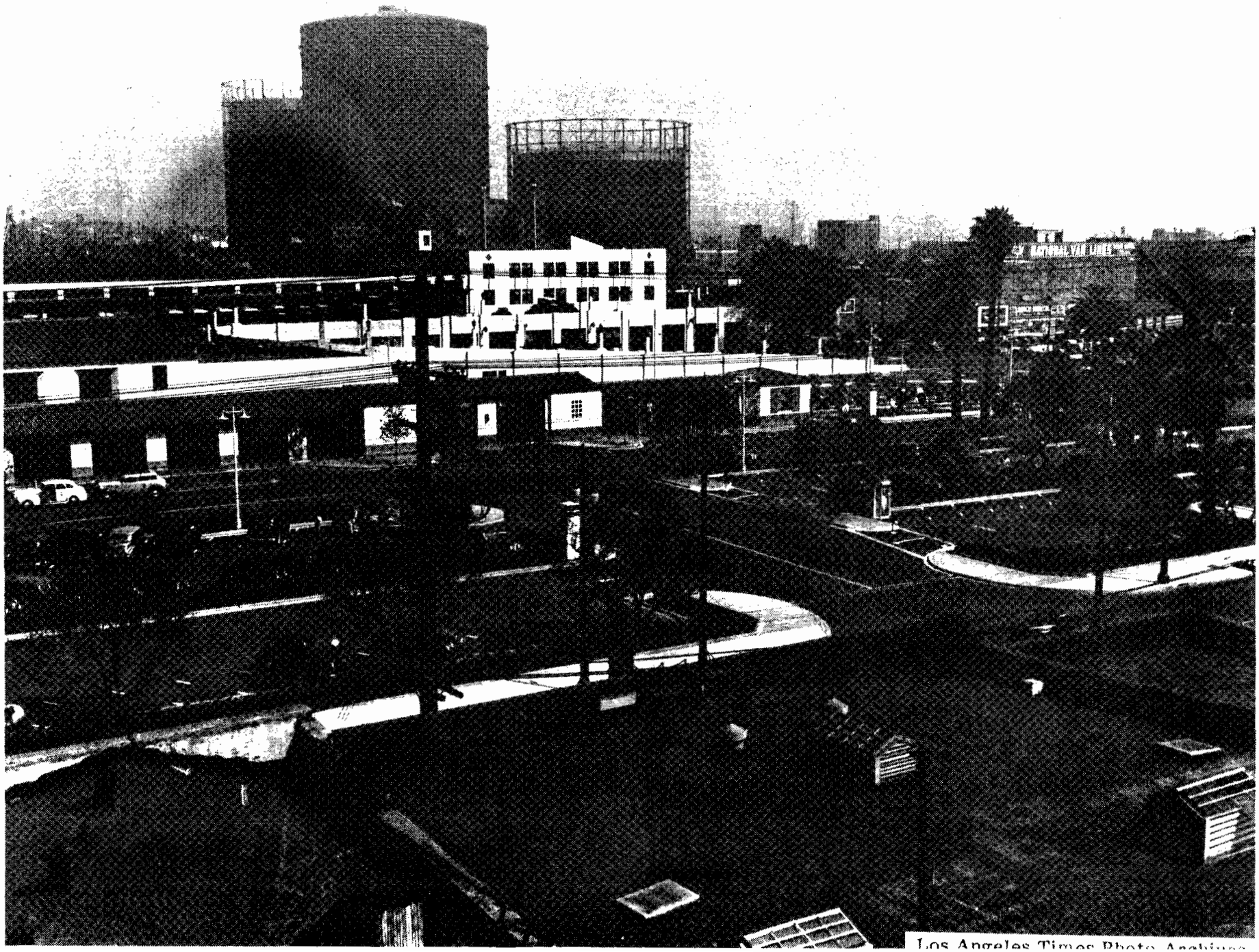

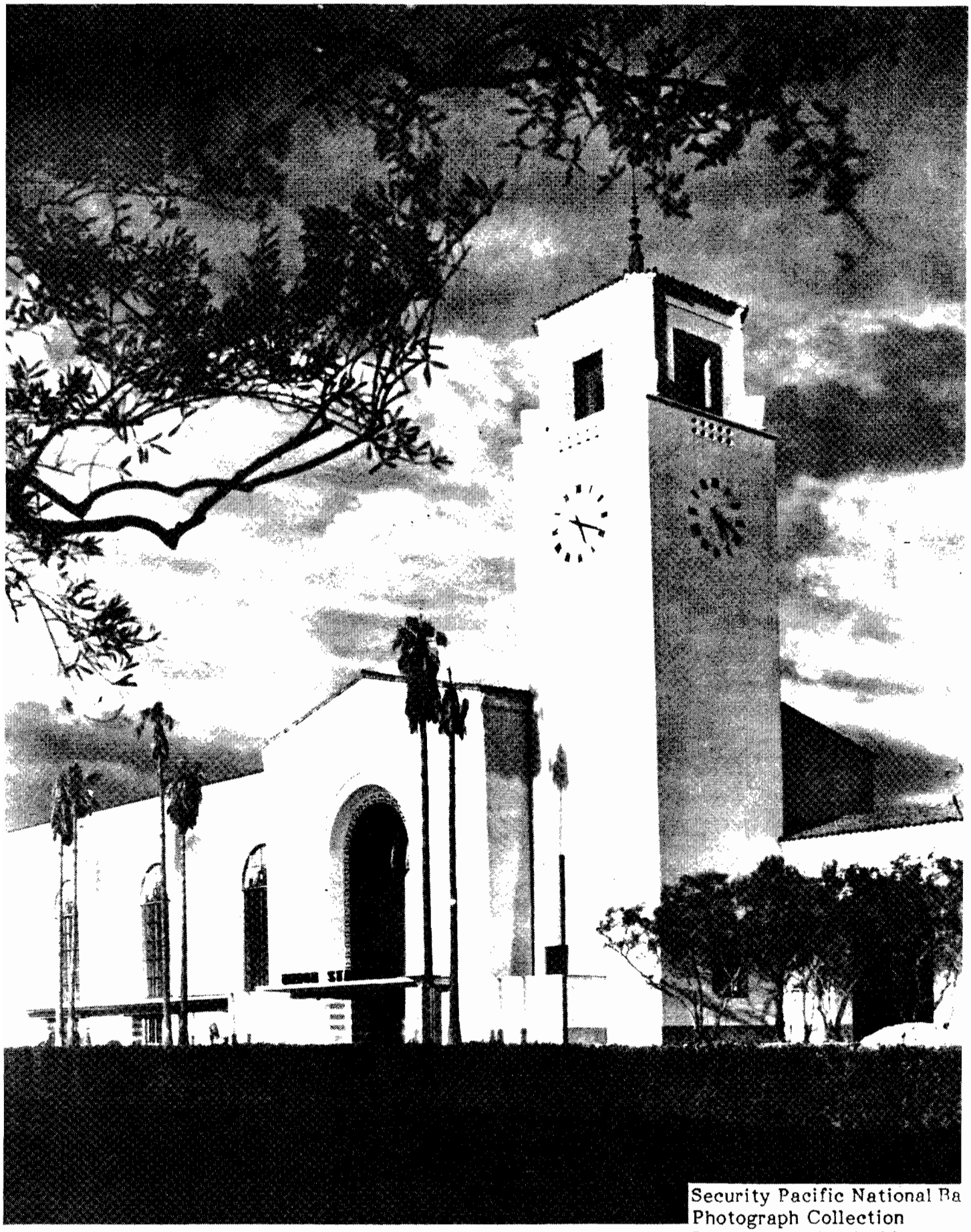

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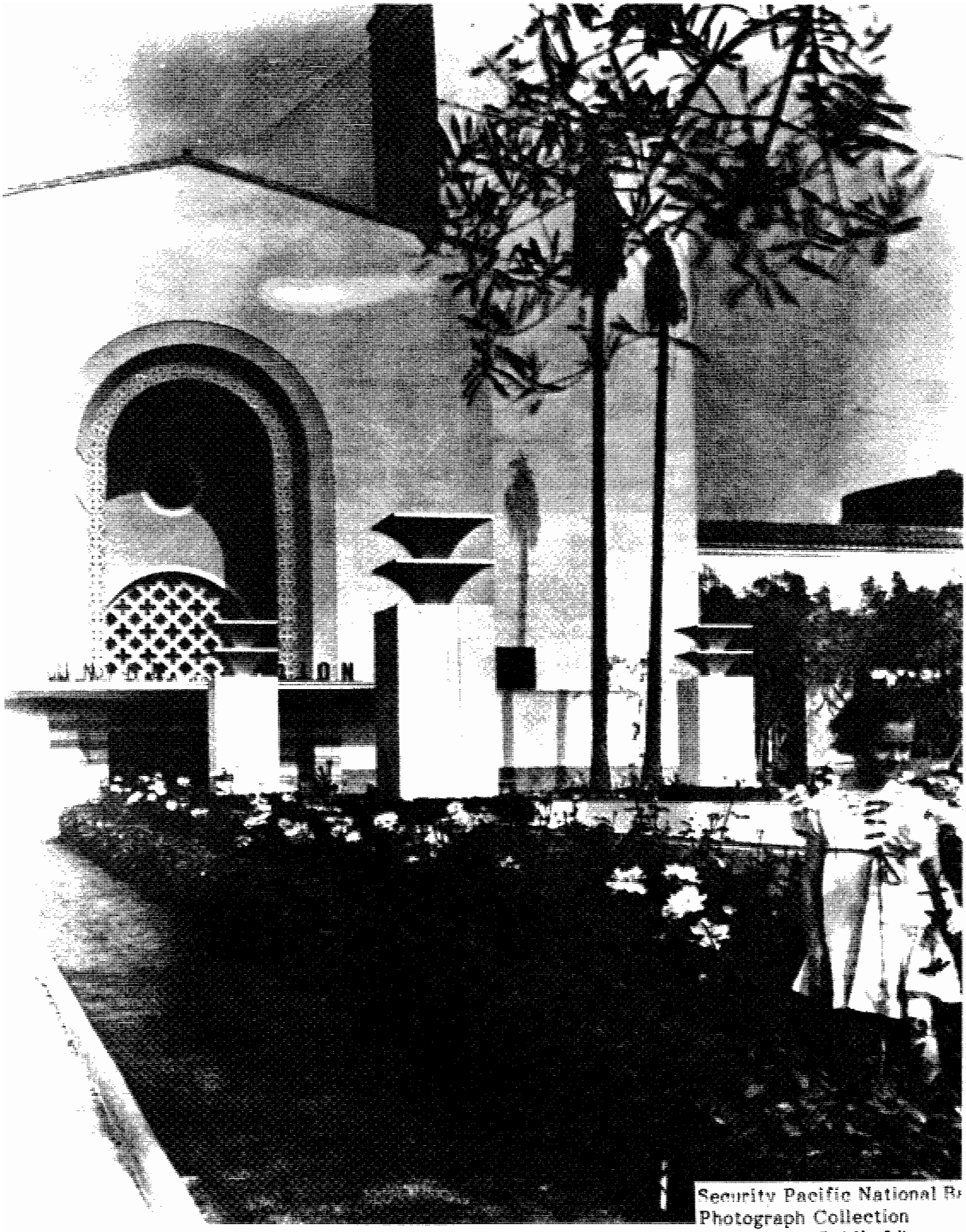

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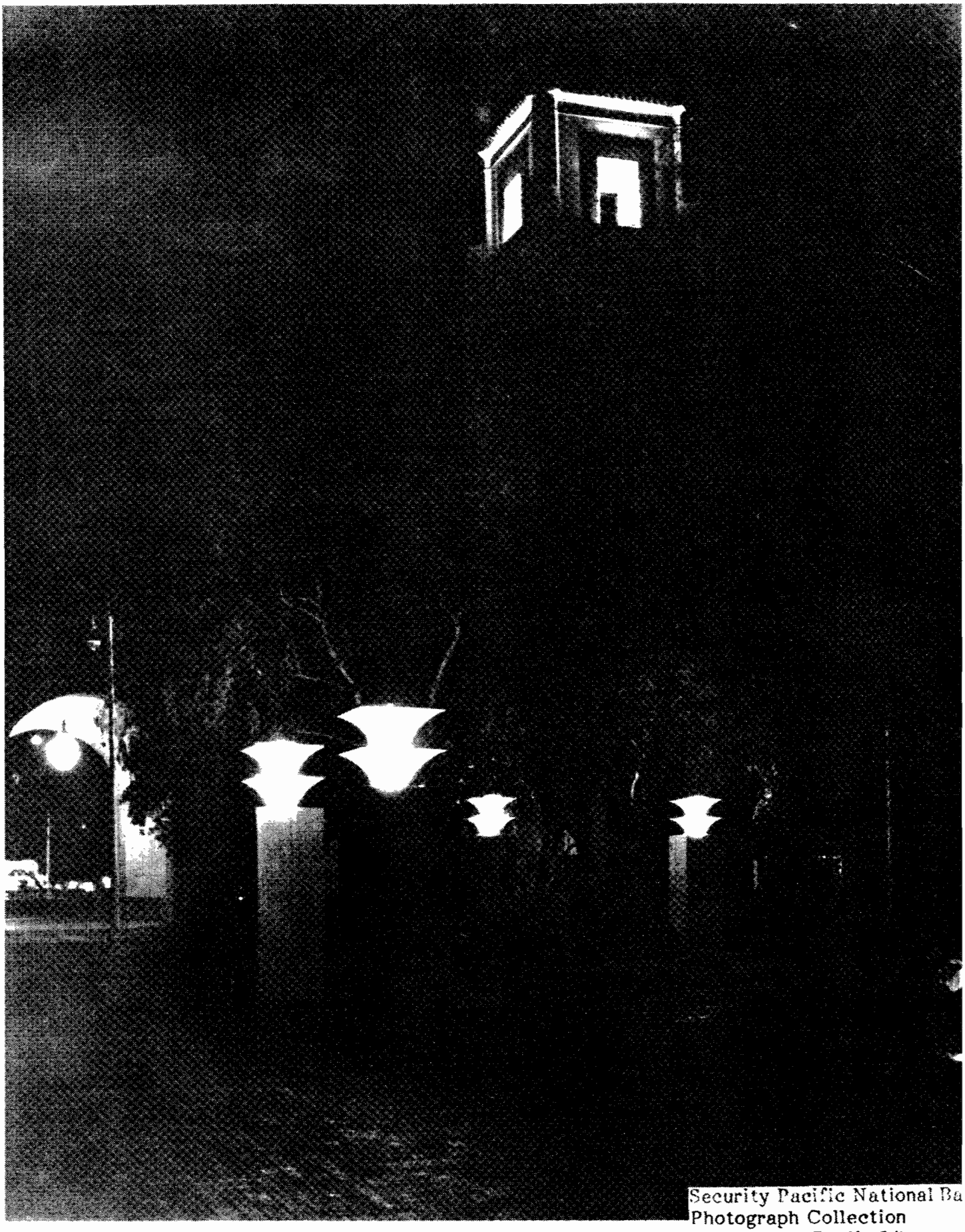

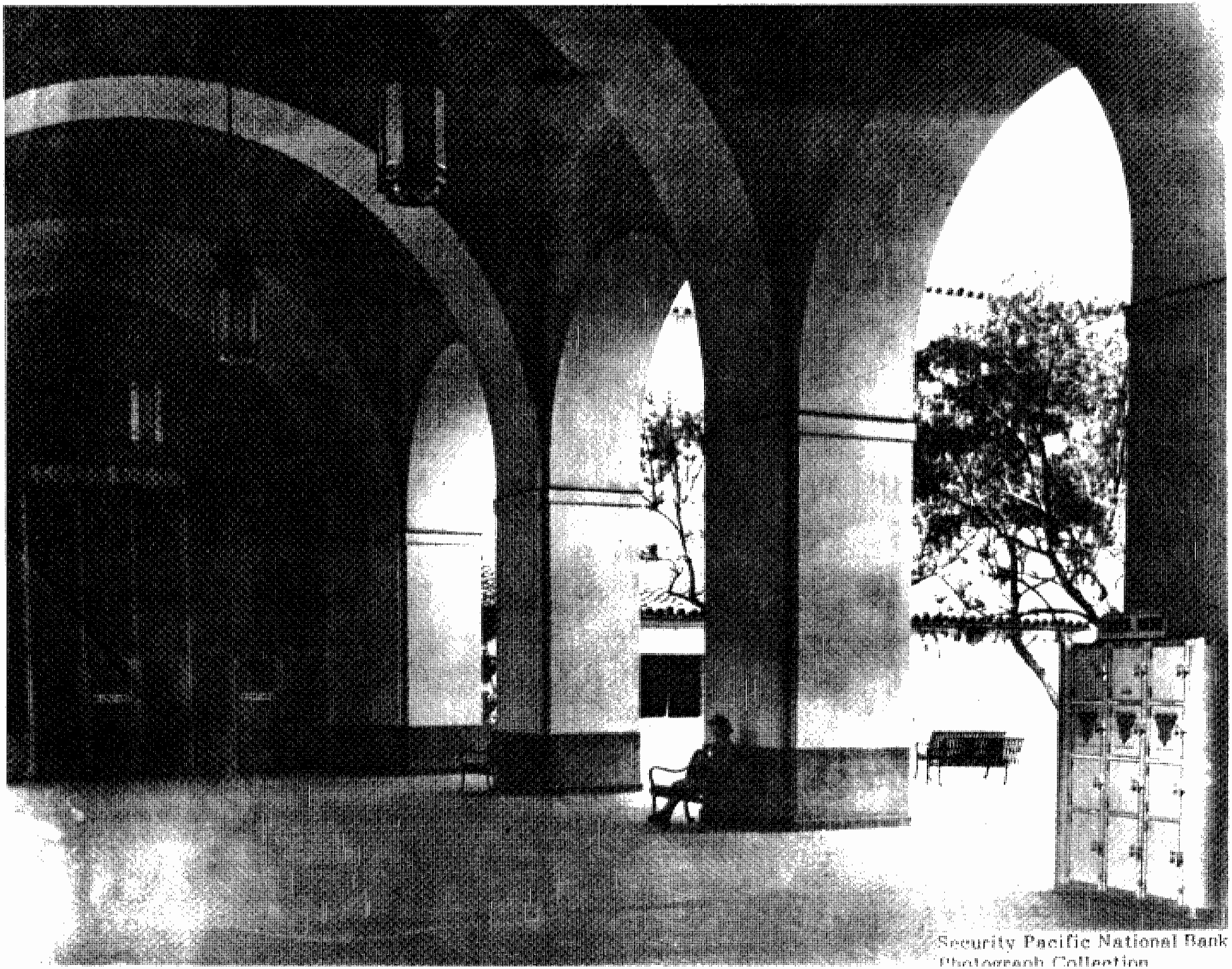

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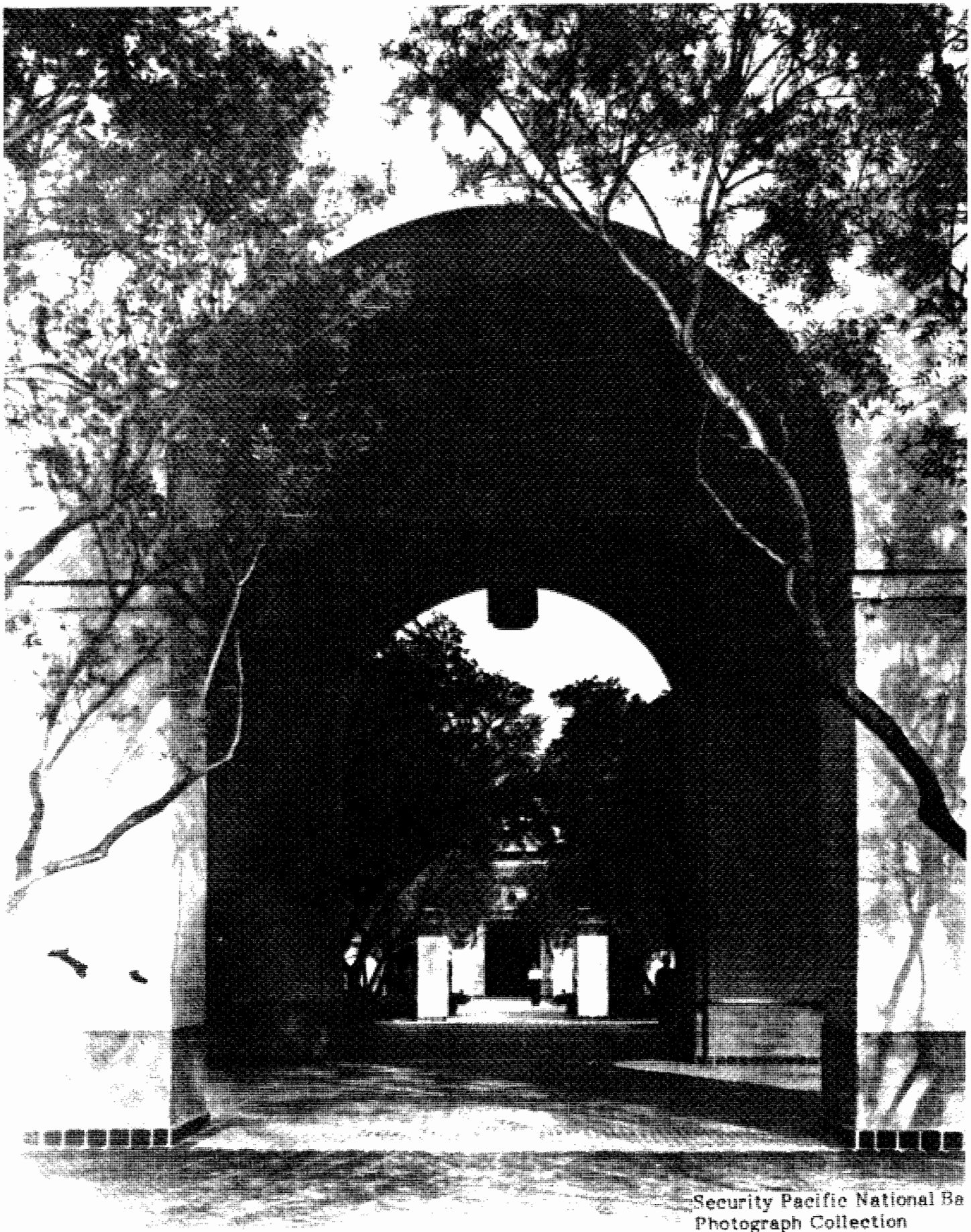

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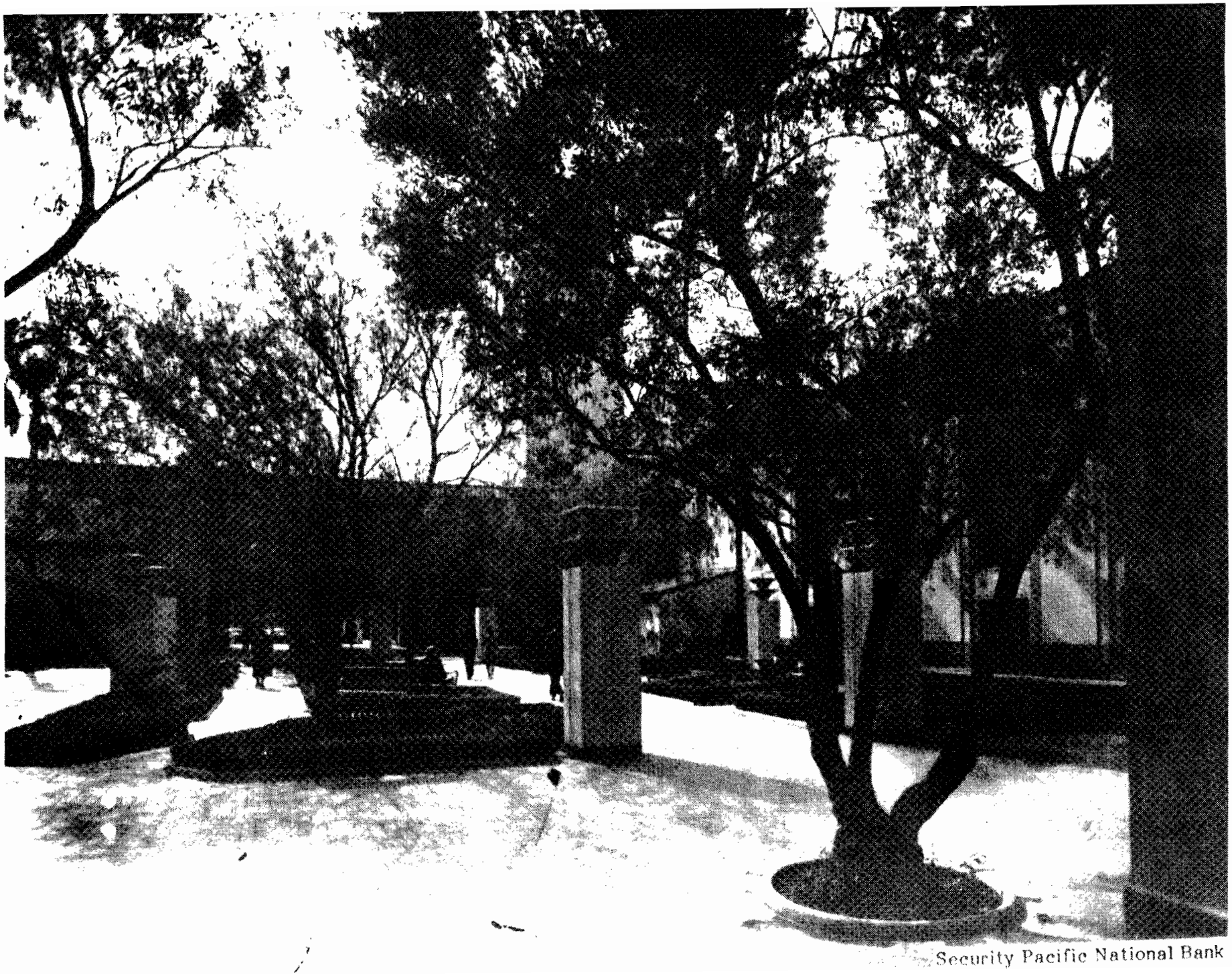
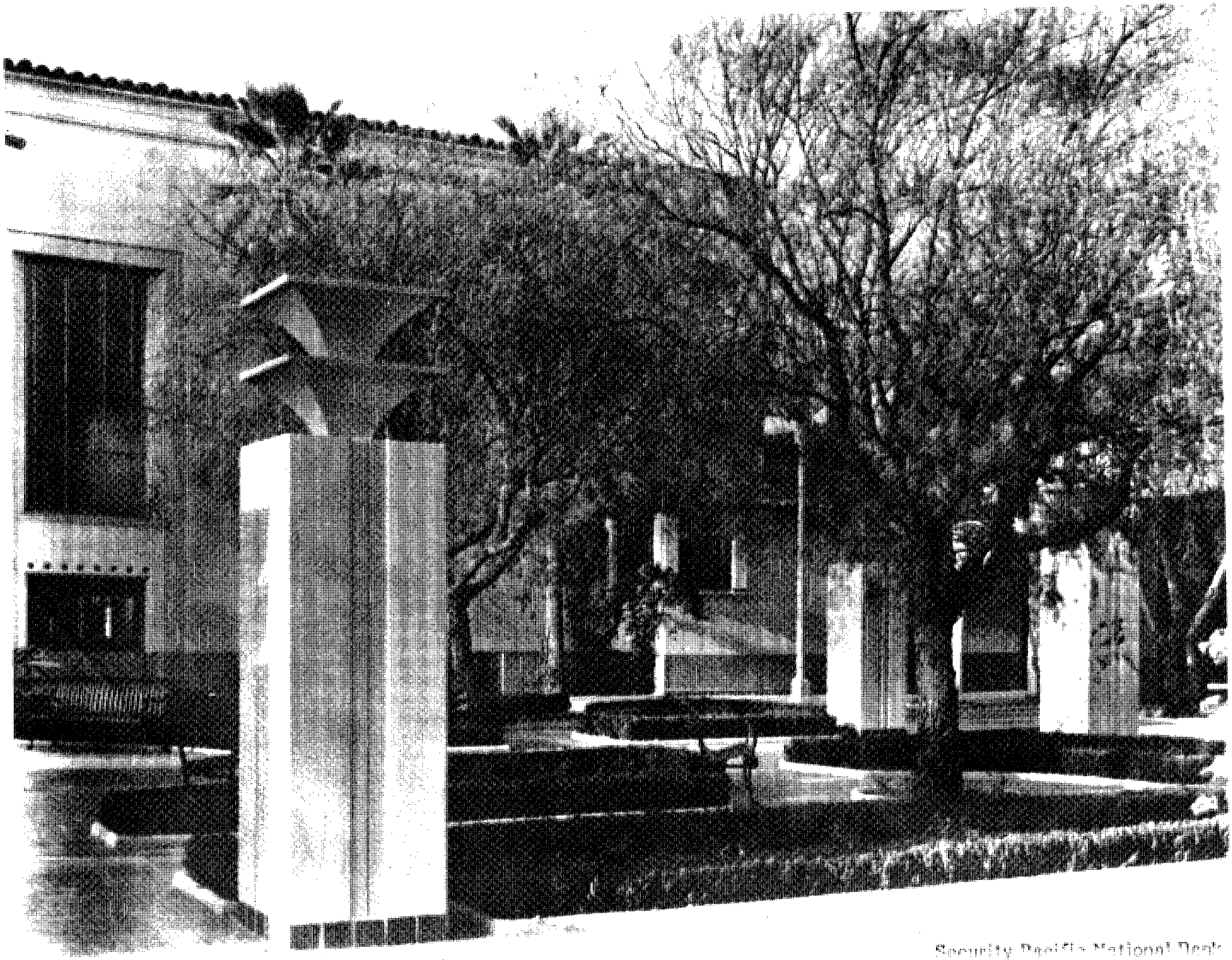
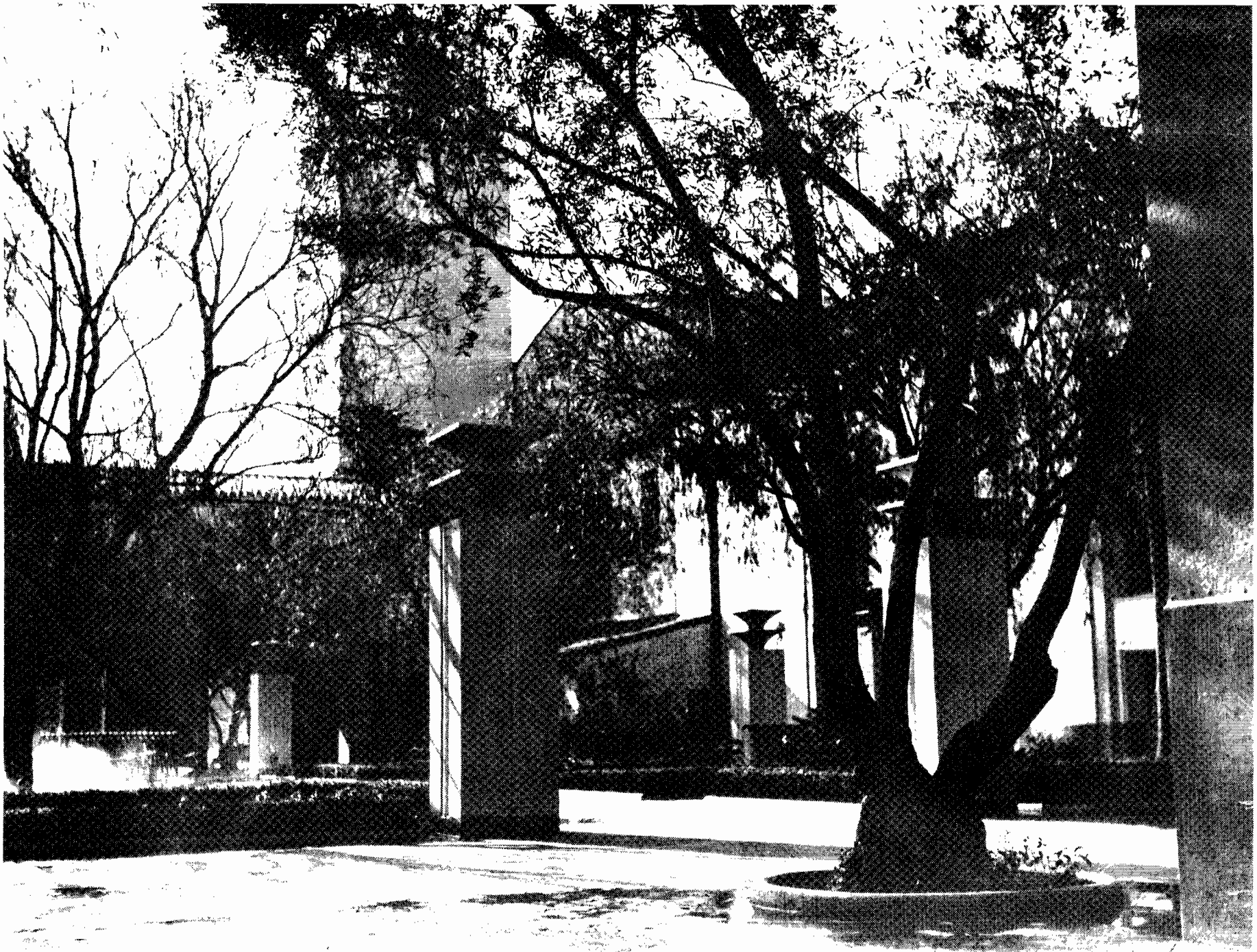


Security Pacific National Bank



Security Pacific National Bank



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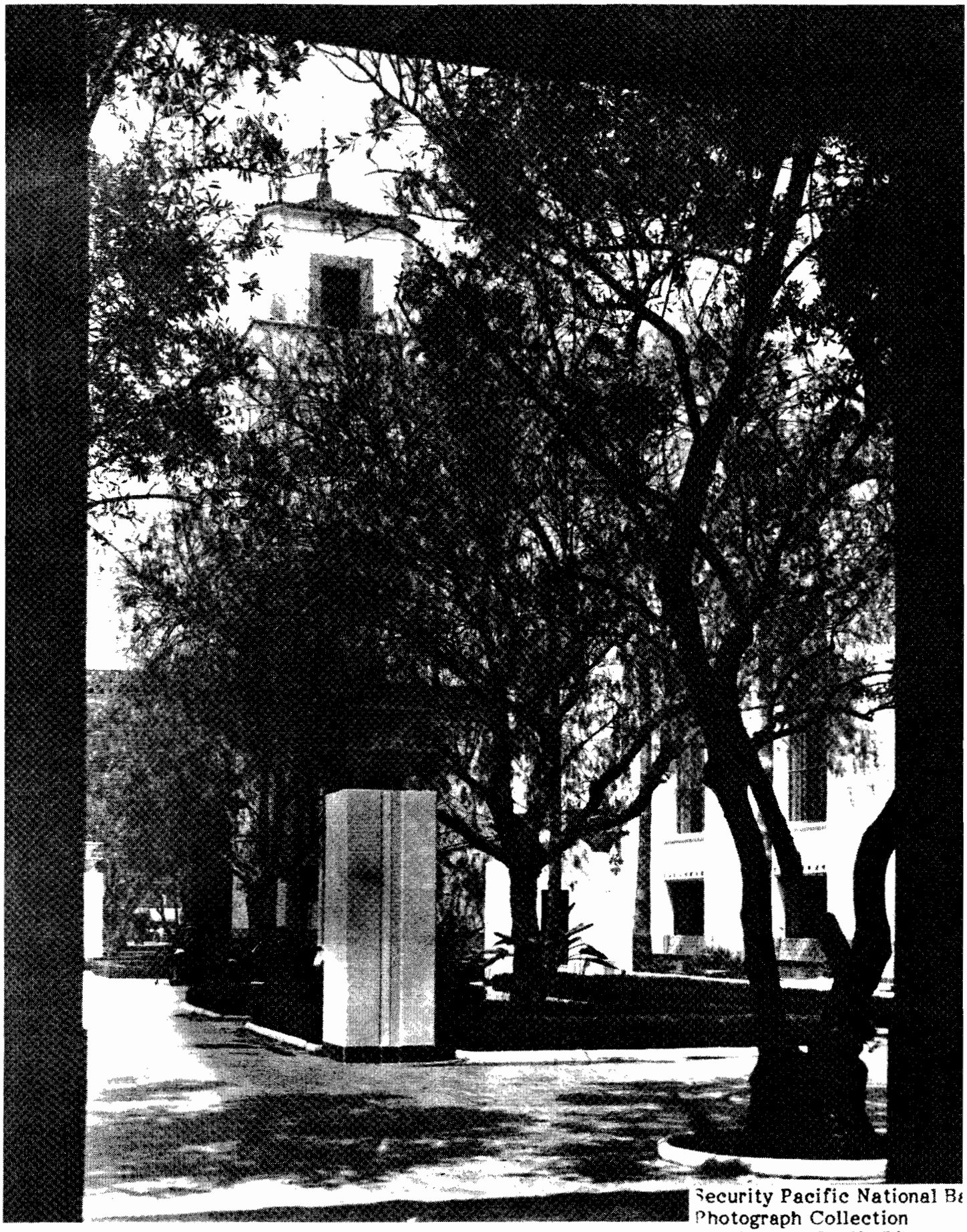

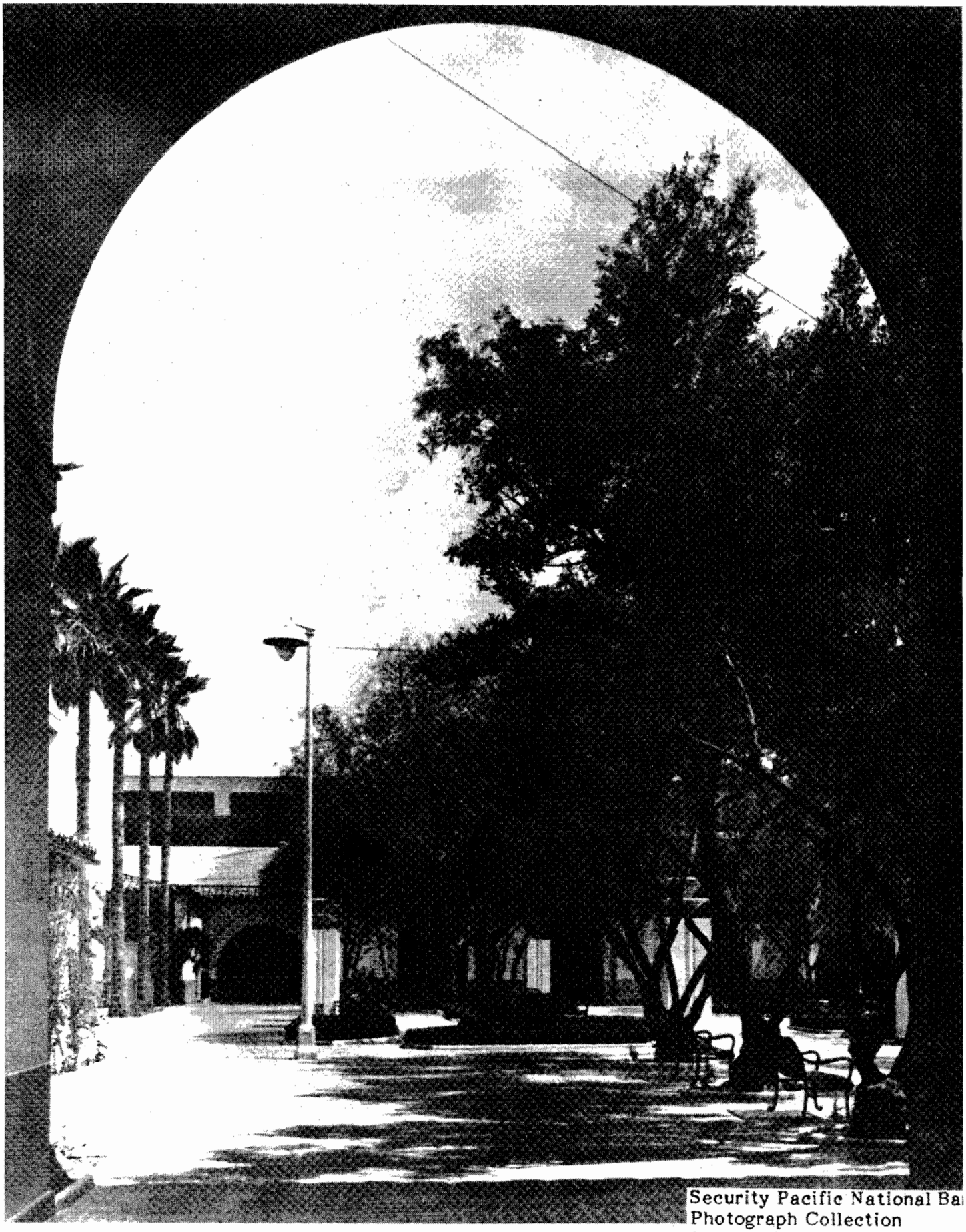

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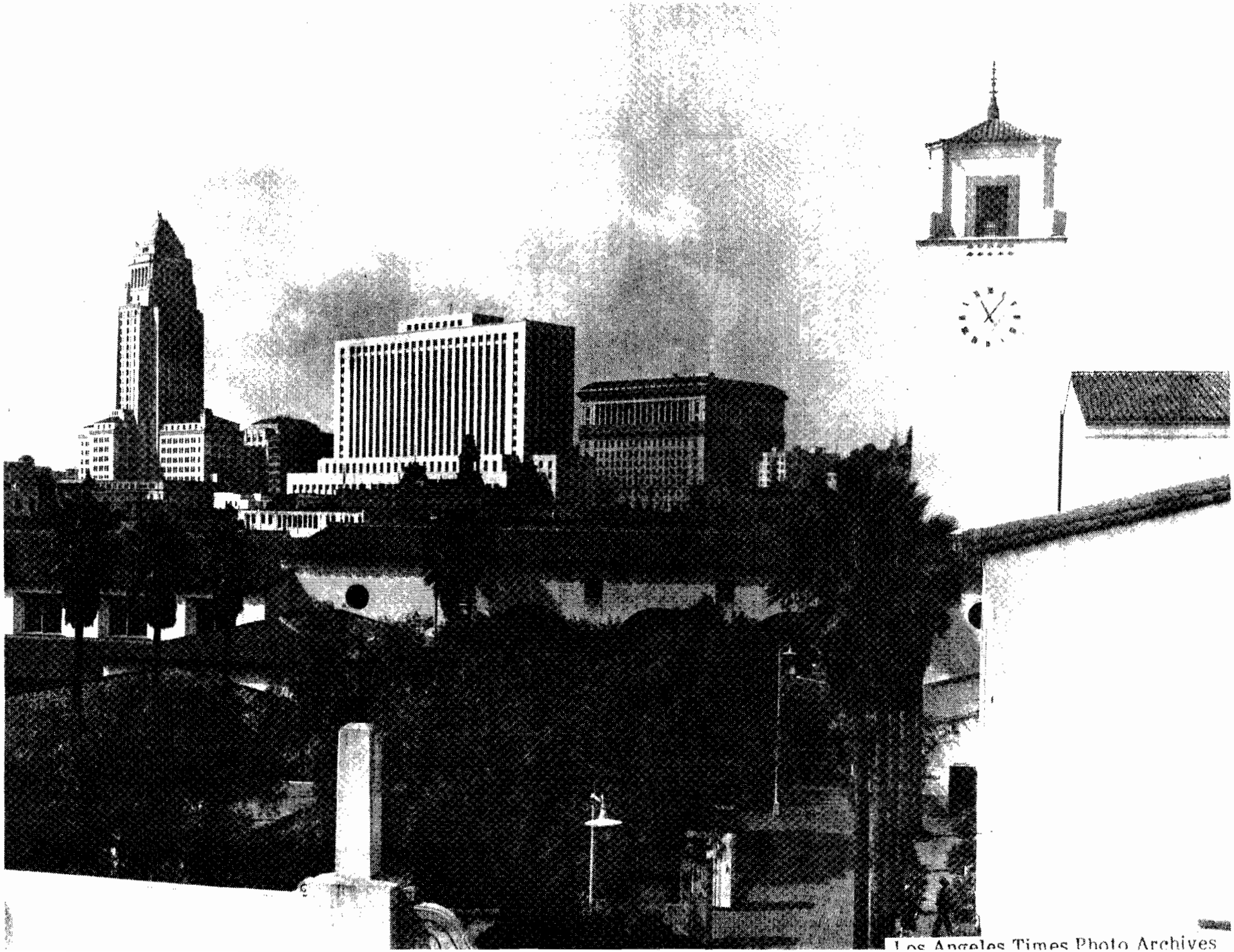

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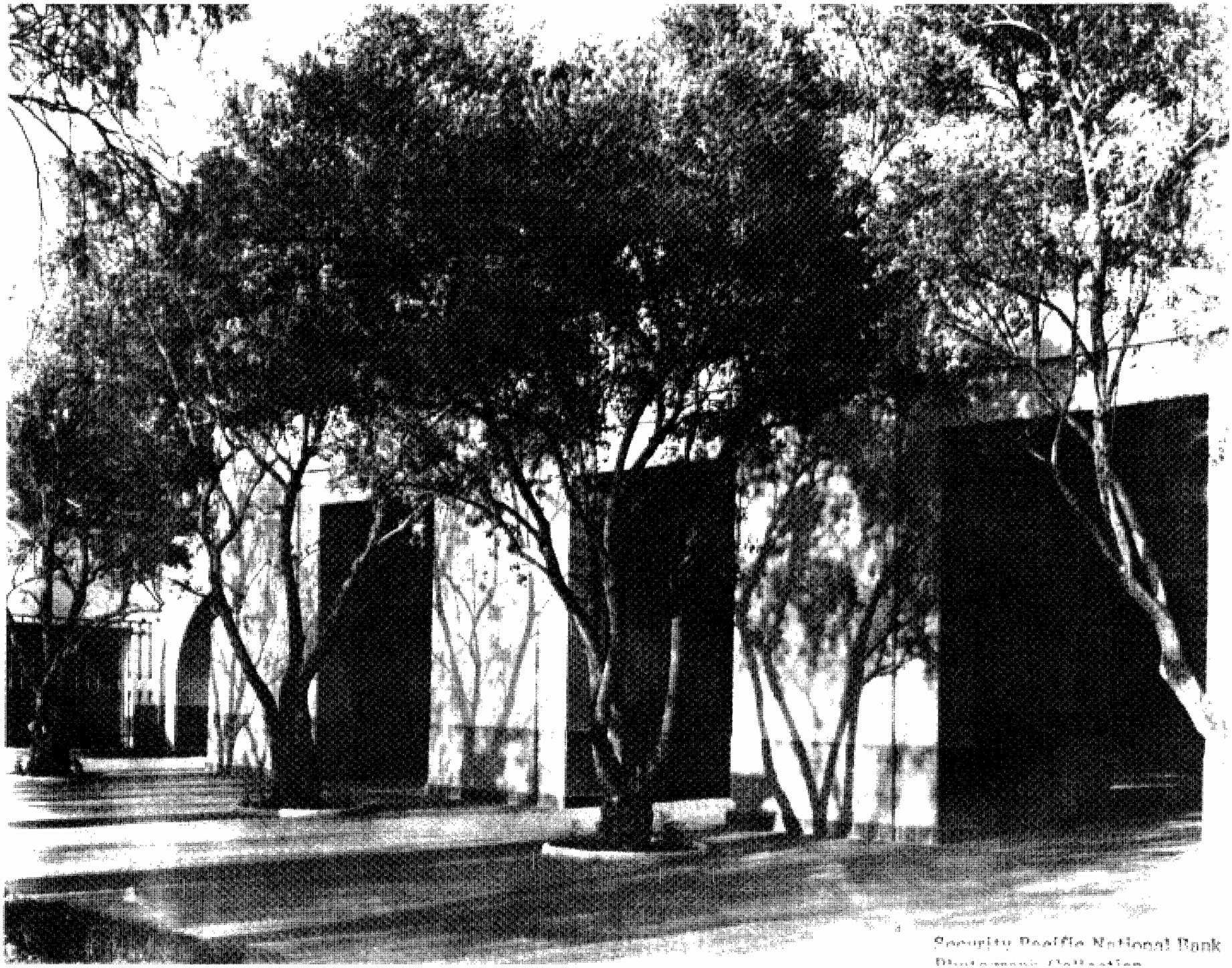

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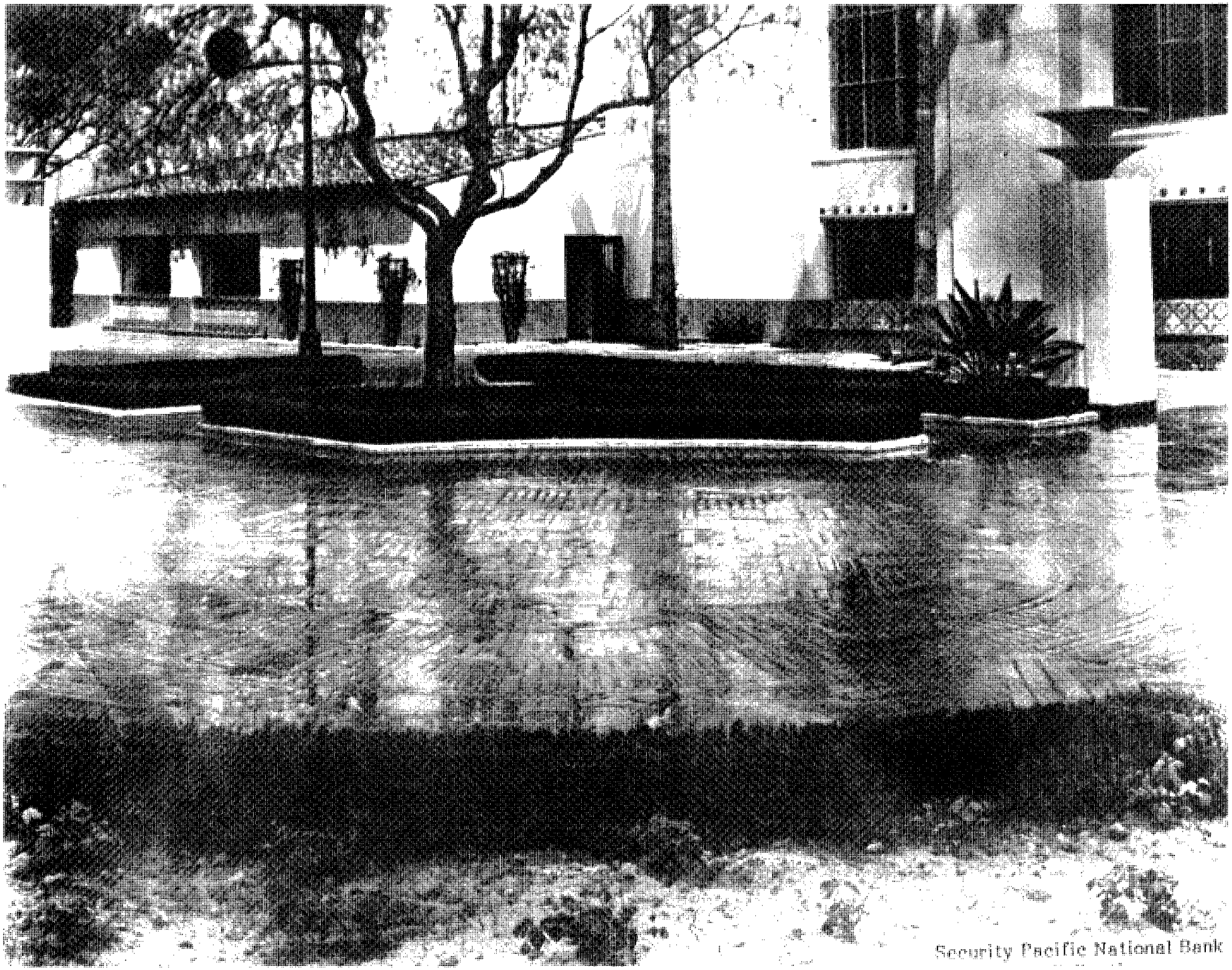
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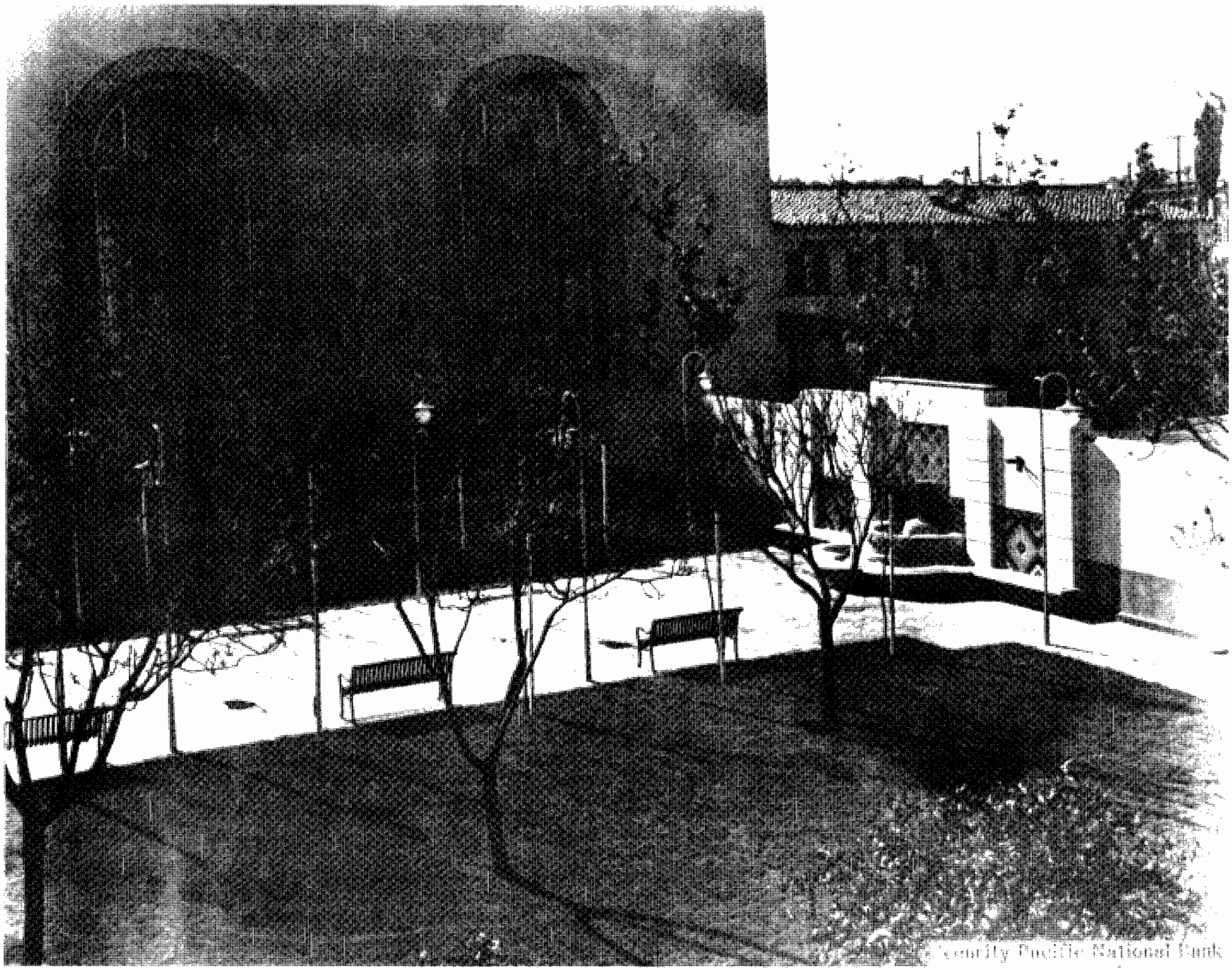
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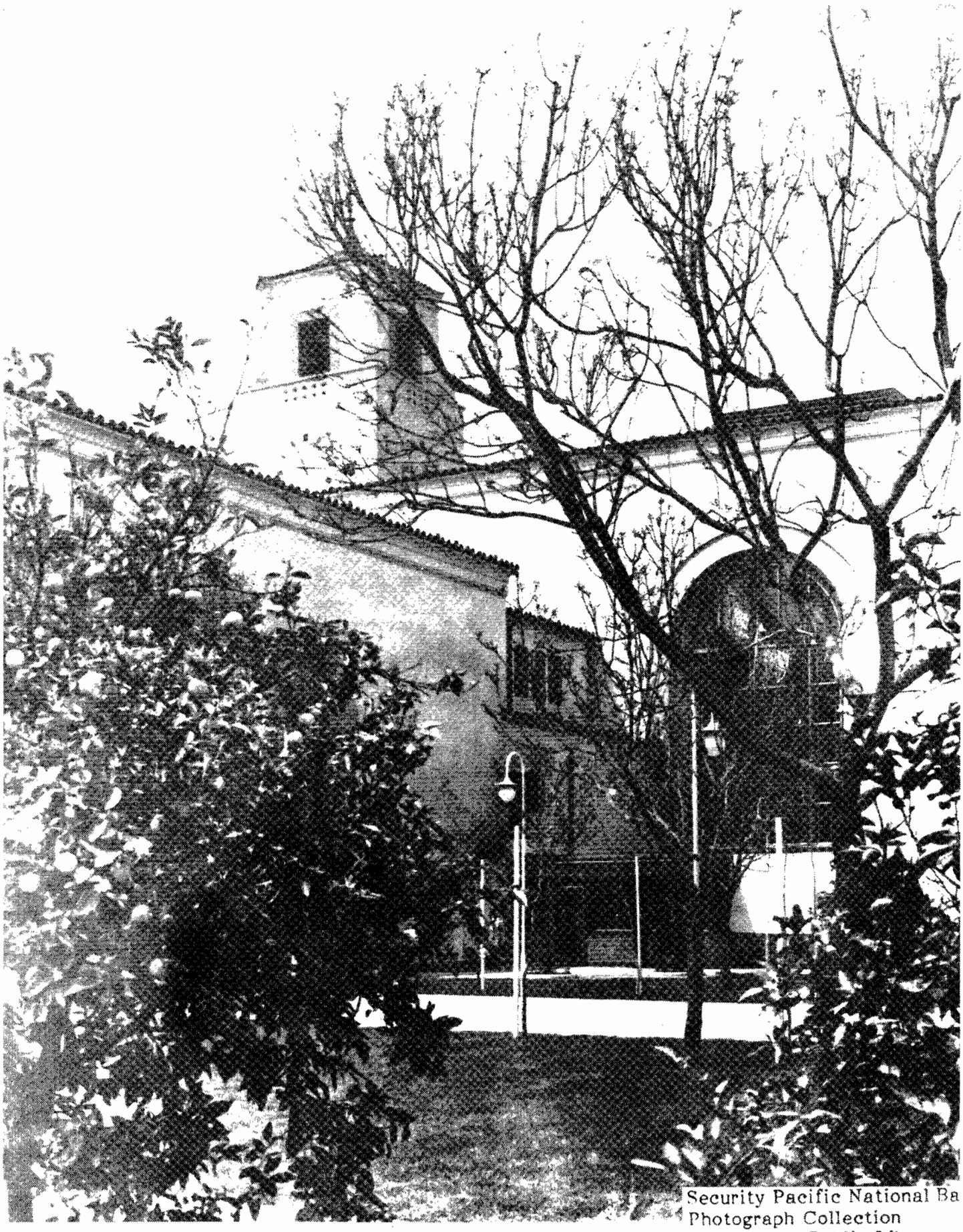

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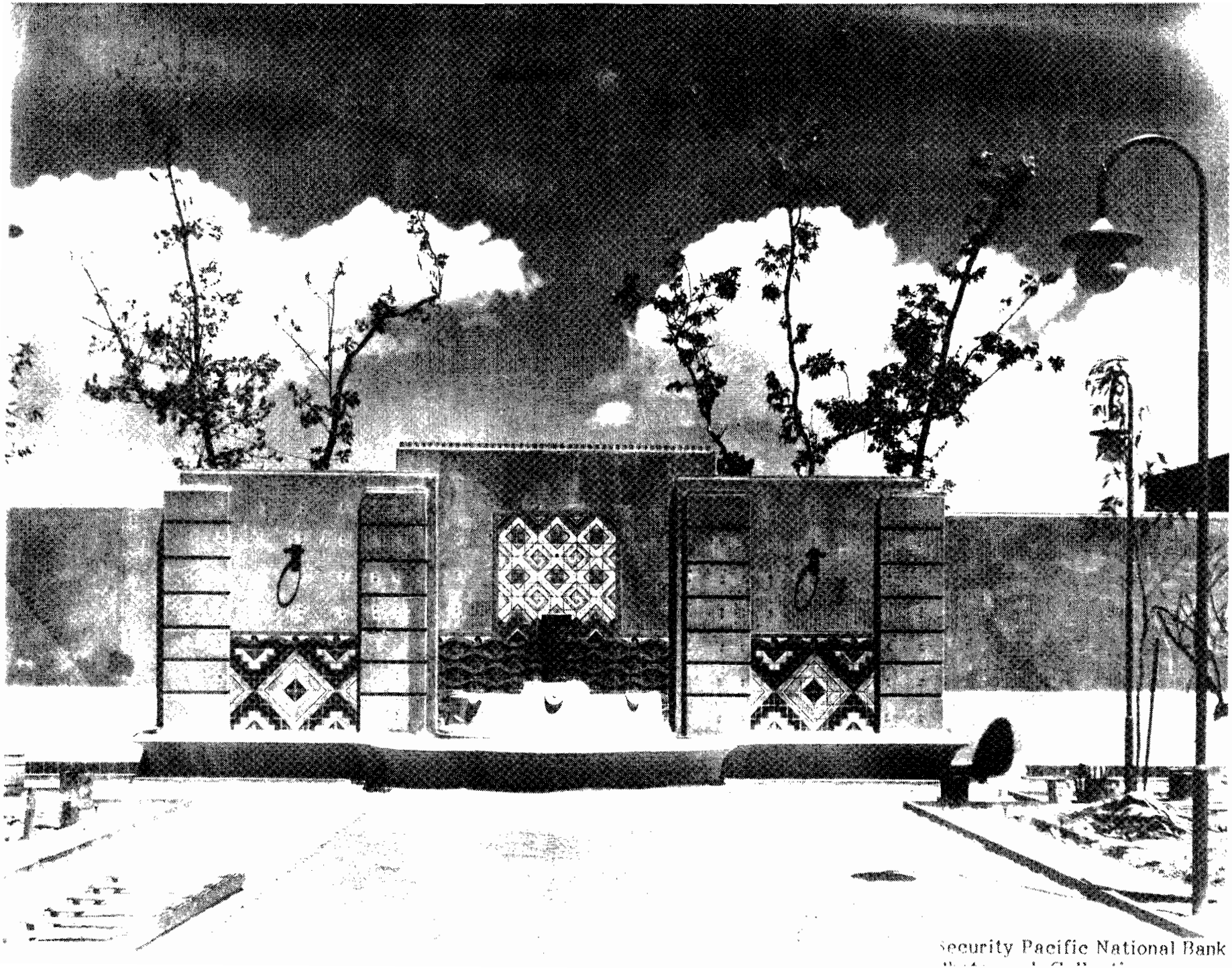

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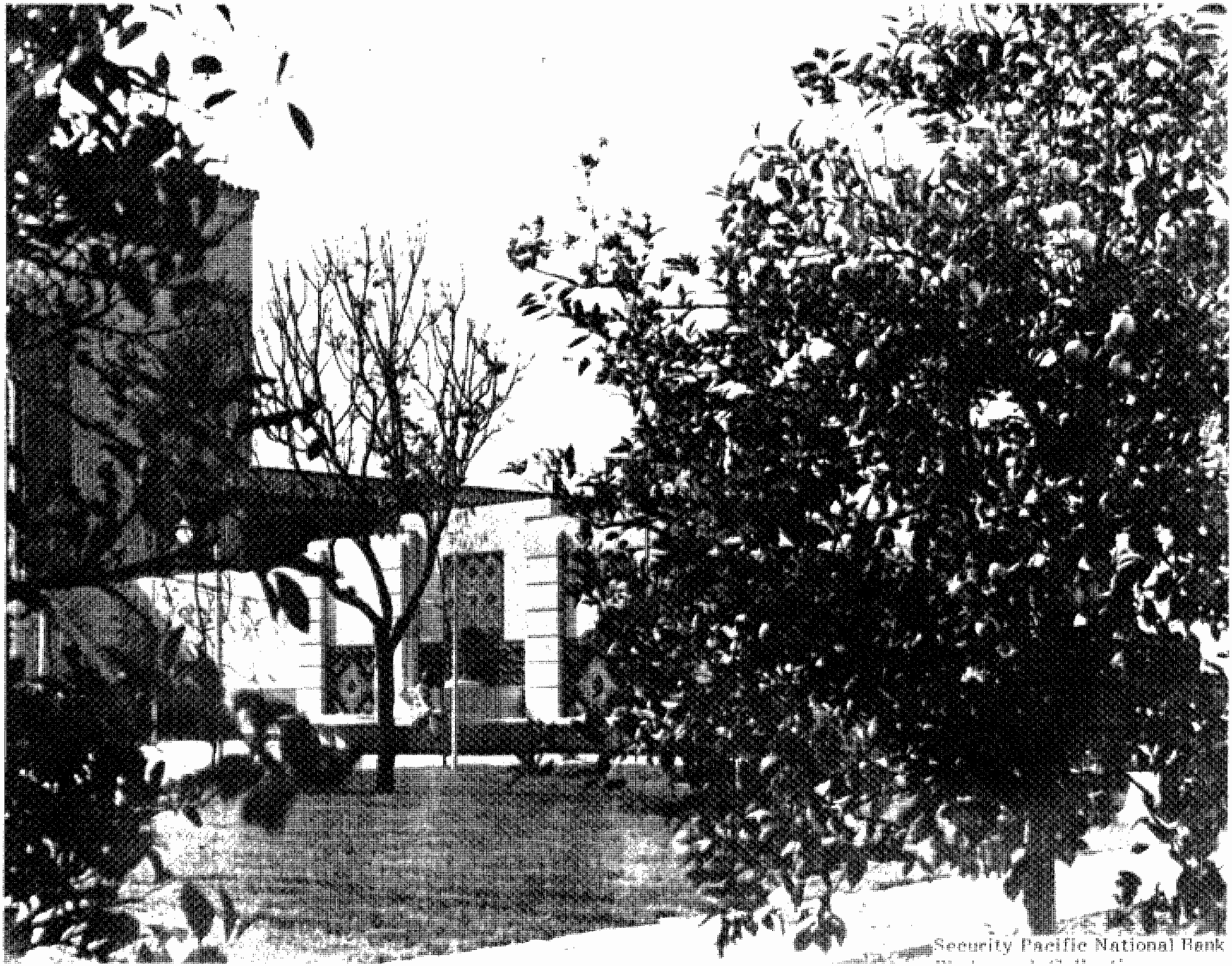
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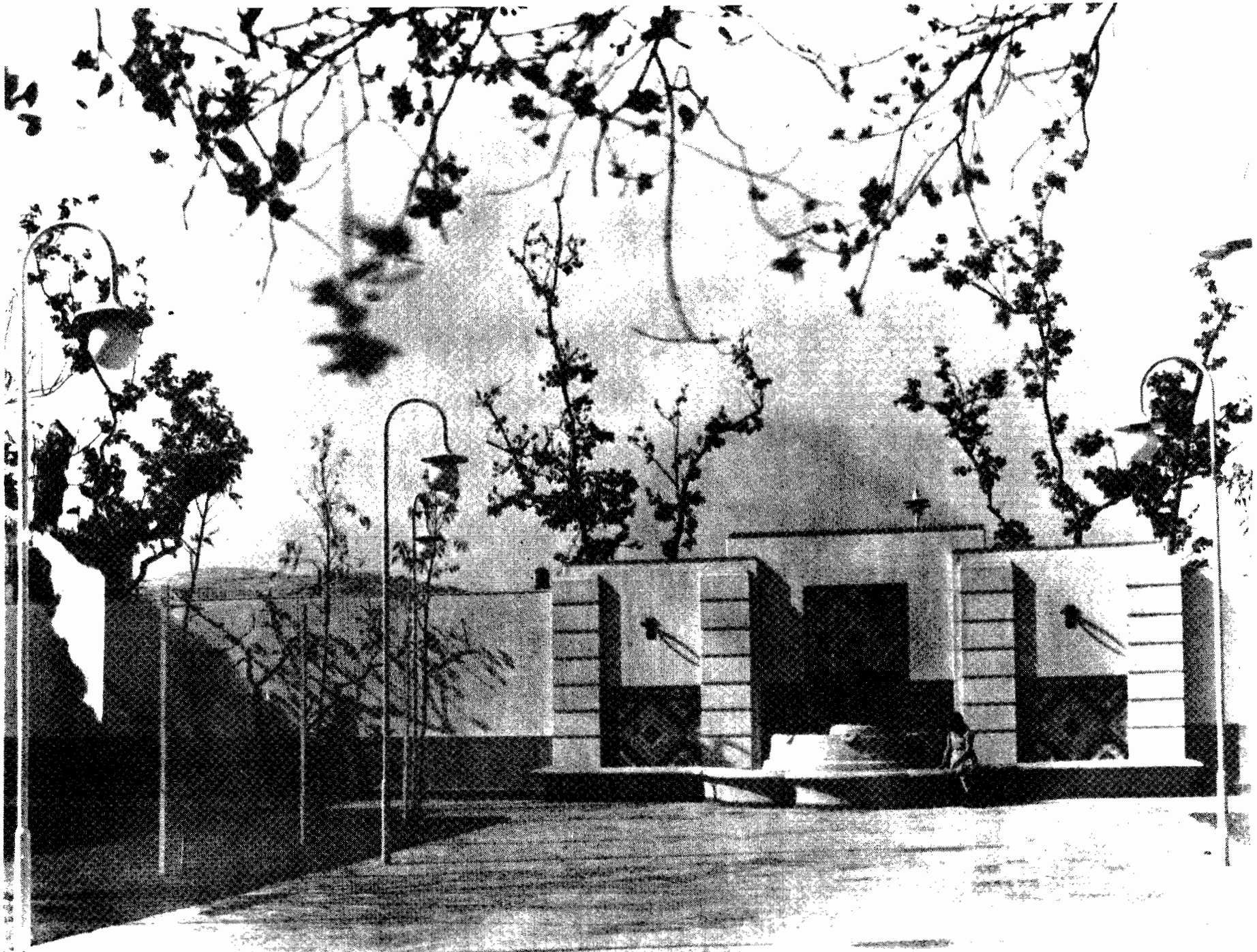

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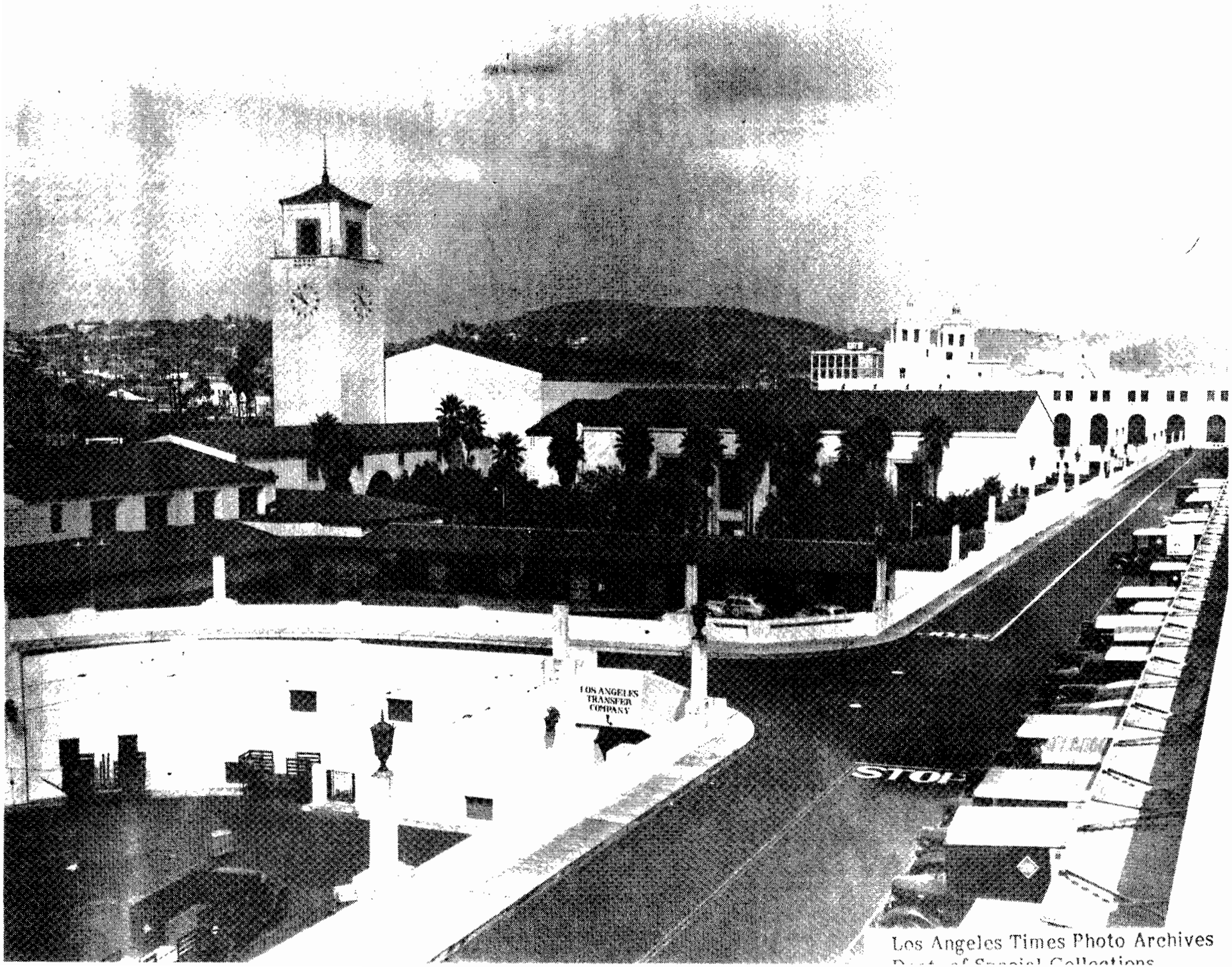

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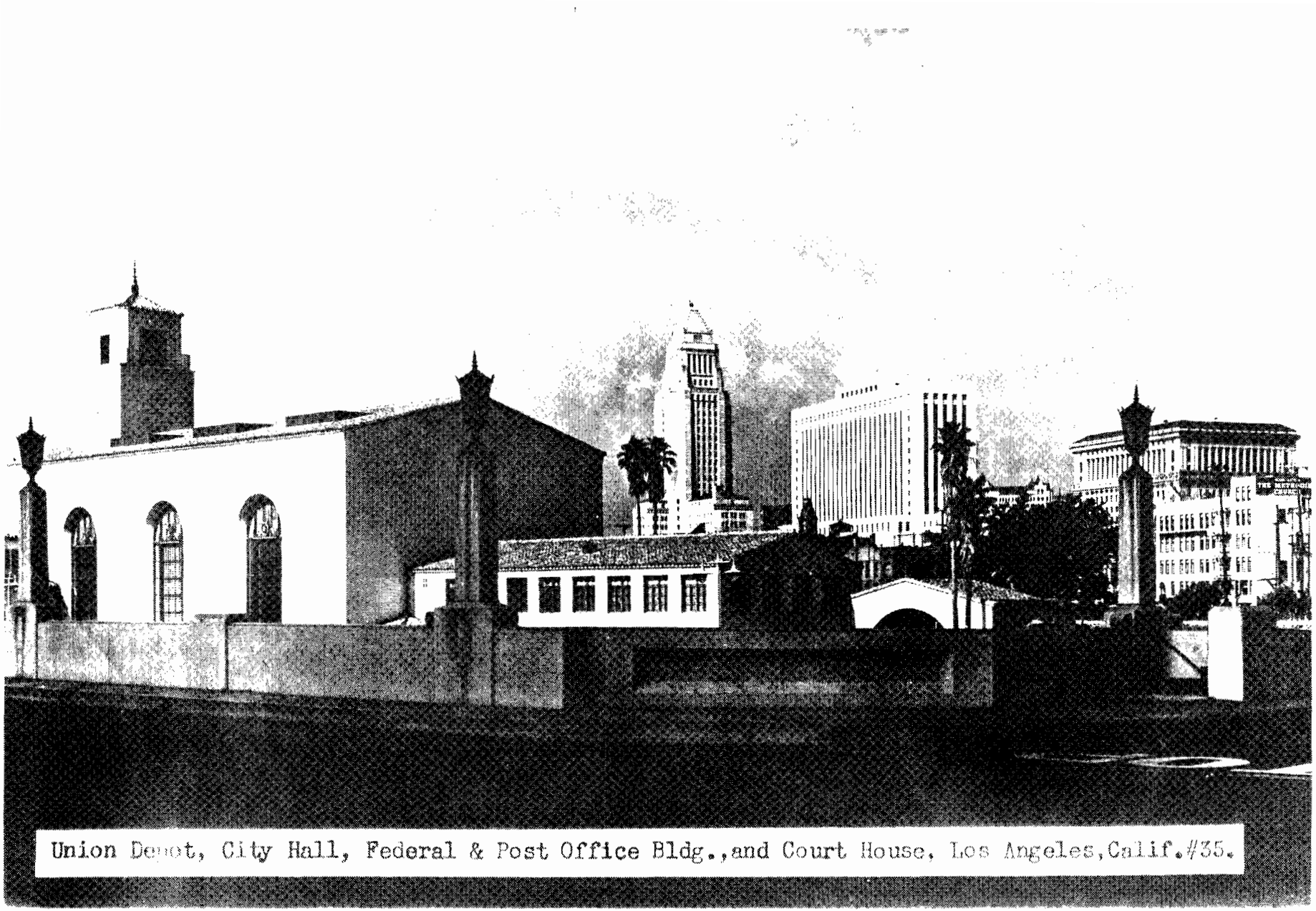

Union Depot, City Hall, Federal & Post Office Bldg.,and Court House, Los Angeles,Calif.#35.

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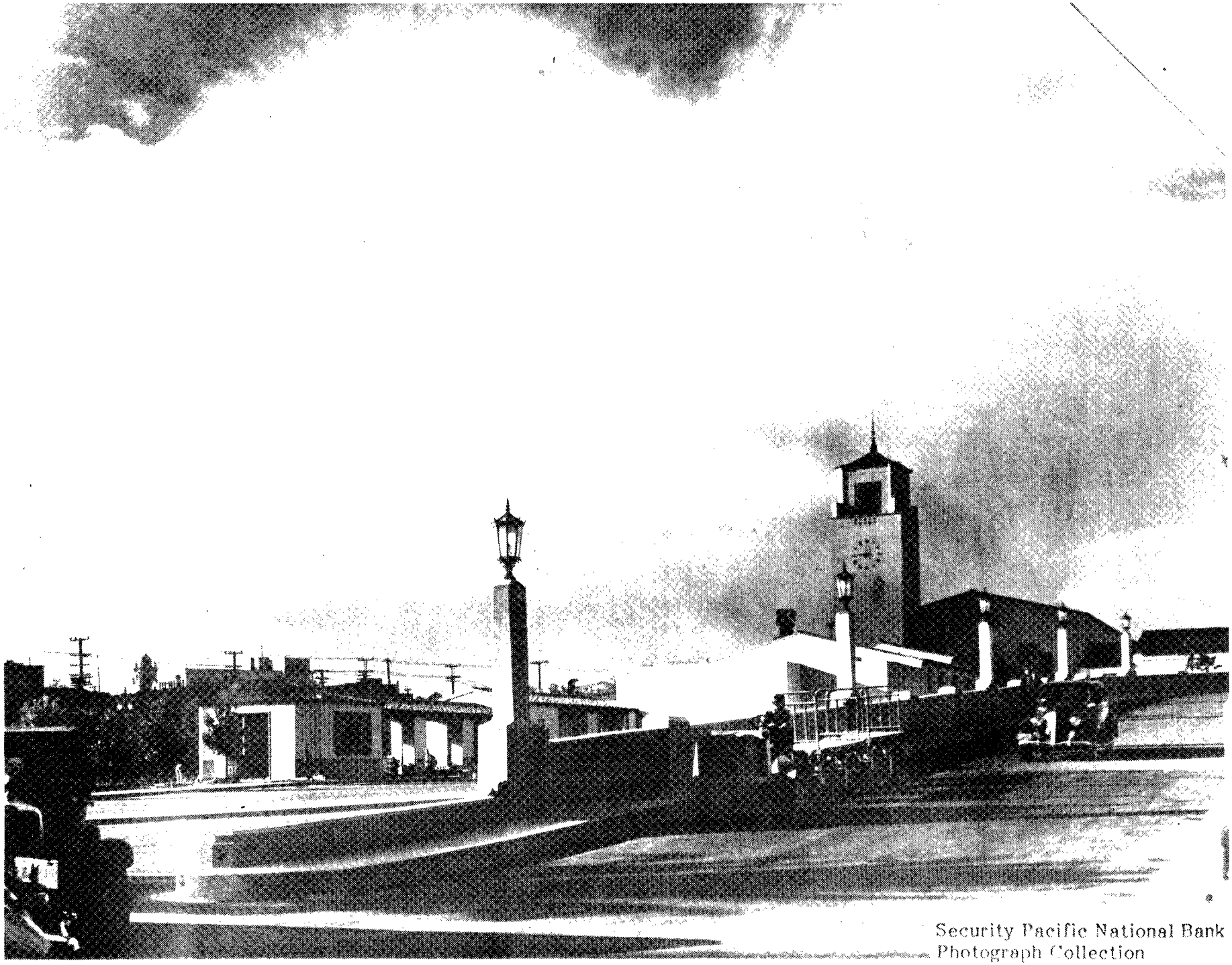

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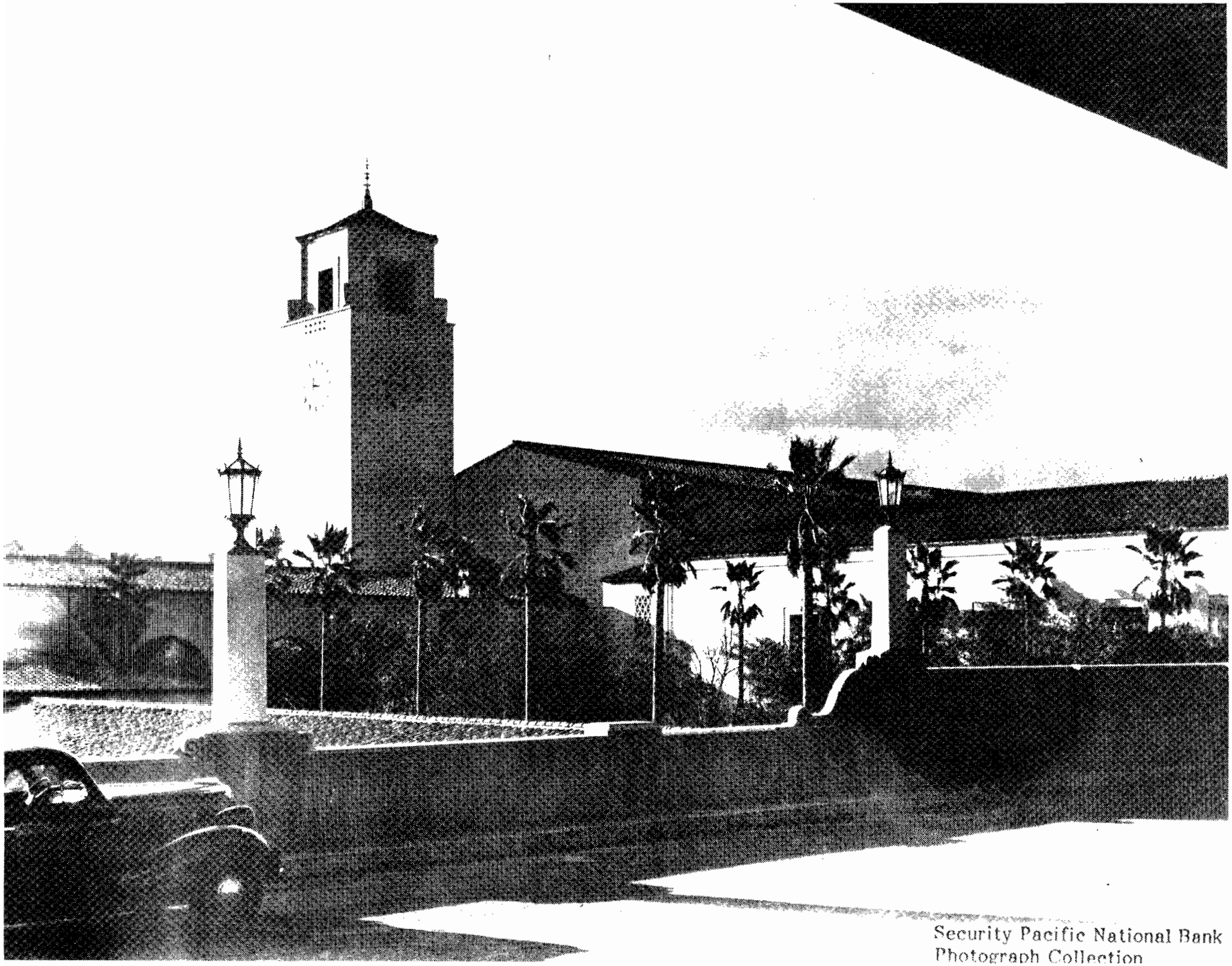

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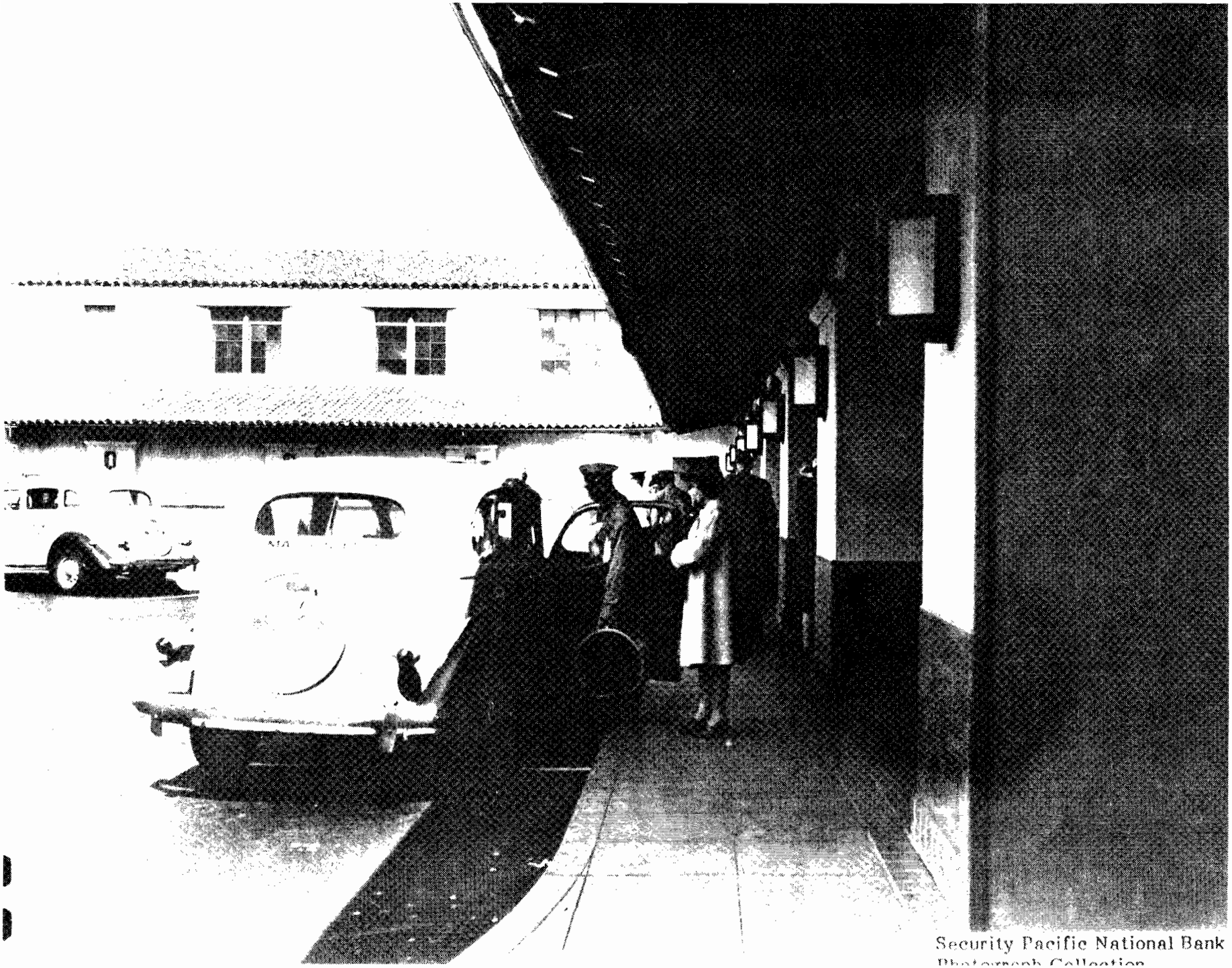

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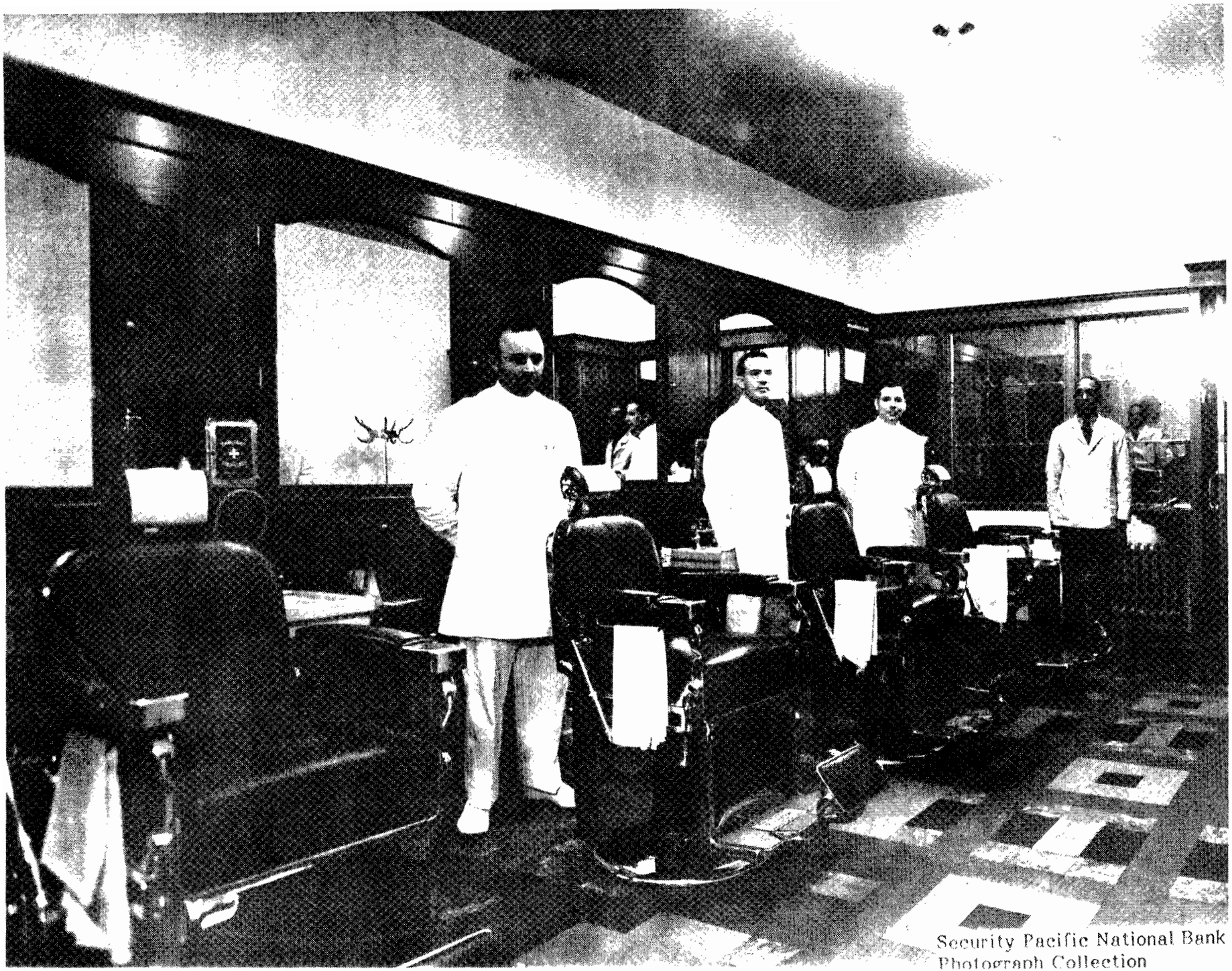

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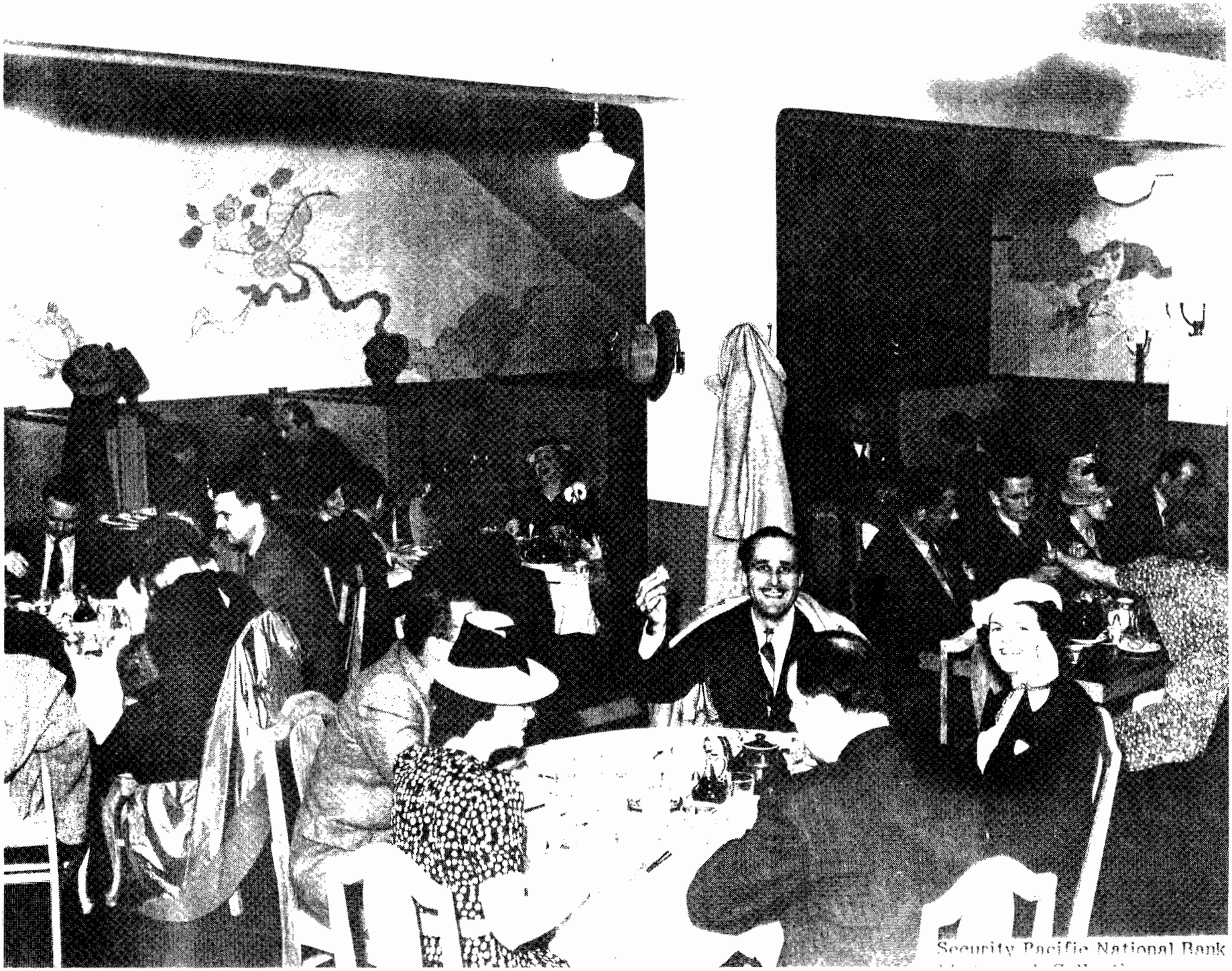
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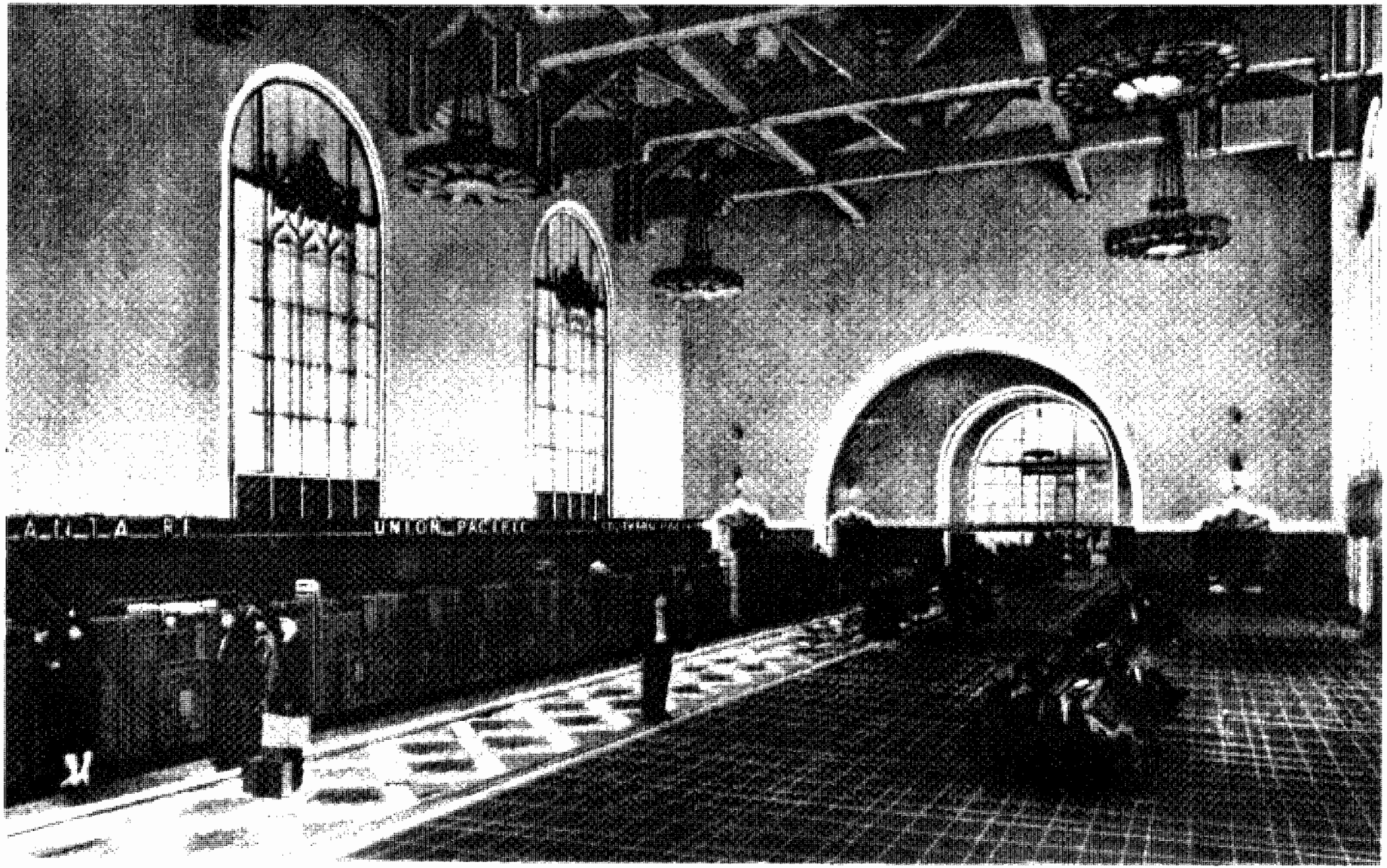

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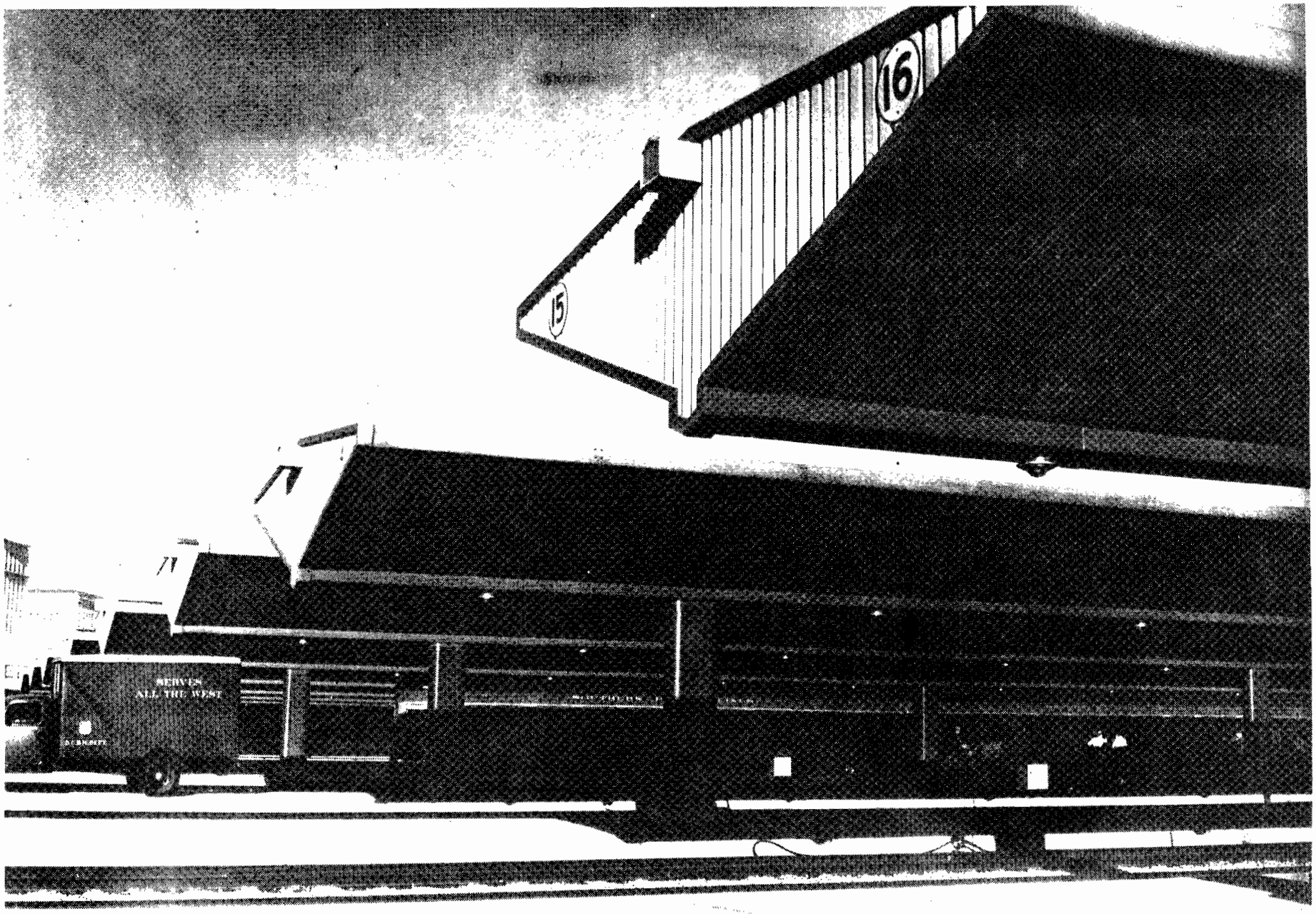

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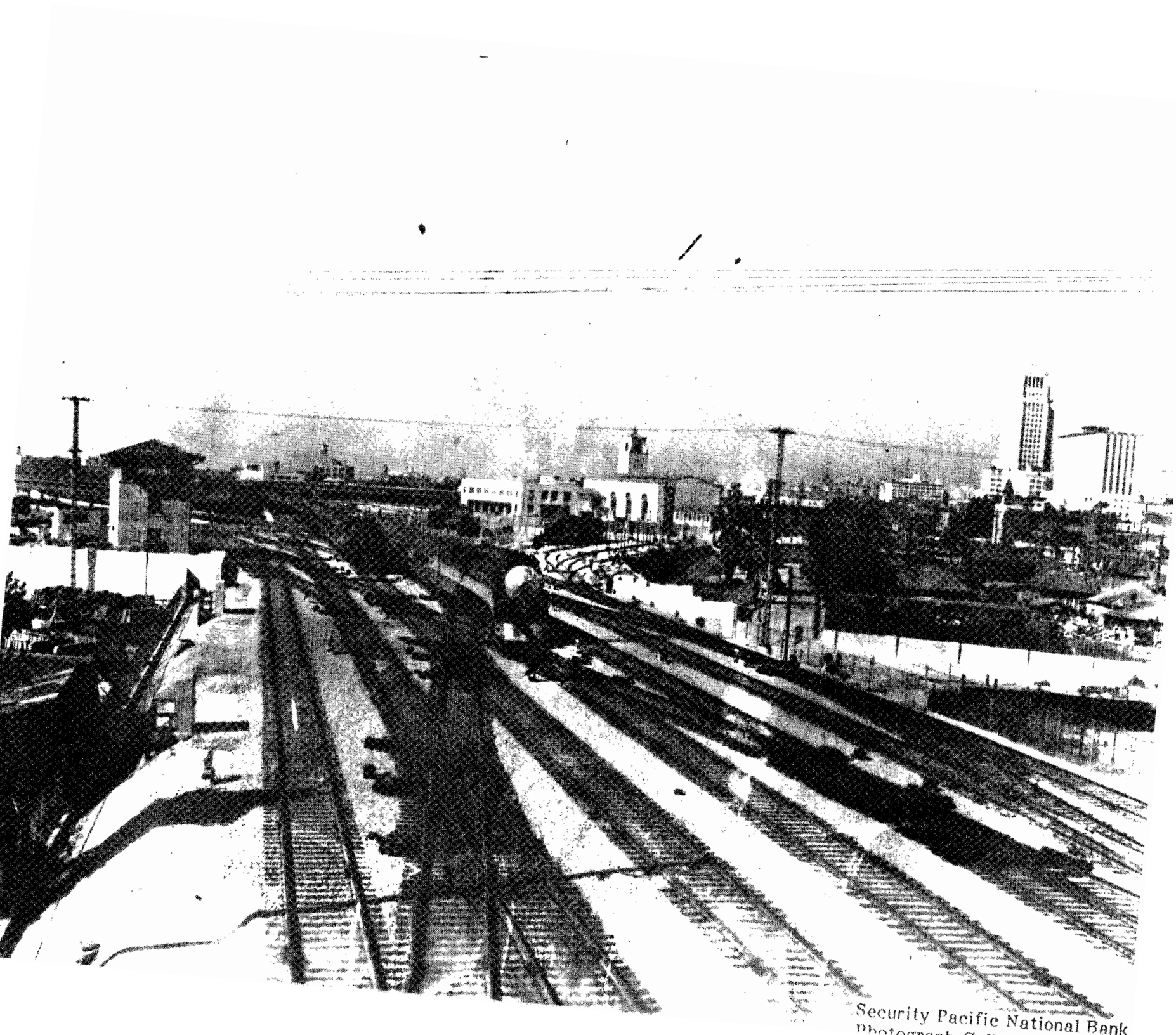

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IV. WRITTEN MATERIAL

List of Written Materials

1. Brochure 1939: "To Acquaint You with Union Station".

2. "Union Passenger Terminal at Los Angeles, CA", Railway Age, 106, (1939) pp. 768-78.

3. Photograph and Byline, California Arts and Architecture, April 1939, p. 5.

4. "Los Angeles Union Passenger Station is Beautiful Architectural Creation", Southwest Building and Contractor, April 1939.

5. "Los Angeles Union Passenger Railway Station", Architect and Engineer, May 1939, pp. 37-41.

6. "Participation of Engineering in Early Development of Union Terminal", Southwest Builder and Contractor, May 5, 1939, pp. 17-20, 93-96.

7. "Union Station Passenger Station", May 1939.

8. "Los Angeles Celebrates", Pencil Points, June 1939, p. 20.

9. "A Dream Come True" by Charles R. Littler, California Arts and Architecture, June 1939, p. 28-29, 40.

10. Advertisement: Gladding McBean & Co., California Arts and Architecture, 1939.

11. Advertisement: List of Consultants and Suppliers for the original Union Station Building, California Arts and Architecture, 1939.

12. Advertisement: Portland Cement Association California Arts and Architecture, 1939.

13. Photograph of Train Concourse, Los Angeles Times, 1939.

14. "Railroad Stations" - Architectural Record, January 1941, p. 134-135.

15. Notice of Historic Monument Status by the Los Angeles Cultural Heritage Board, August 2, 1972.

16. "LA's Union Station Conjures a Trainload of Memories" by Bobbie Justice, Los Angeles Times, August 28, 1977, part XI p.1, 8.

17. "Union Station - The Hub of LA's Transit Future", LA Times, Metro Section, October 7, 1979.

18. Letter, 1979 - Los Angeles Conservancy to LAUPT.

19. Nomination Form for the National Register of Historic Places, 1979.

20. "The Visible Past" by Walter Houk, L.A. Times, pp. 44-45.

21. Letter, Source and Date Unidentified.

22. "Terminal Oasis", by Barbara Flanagan, L.A. Architect, 1980.

23. "Union Station", Excerpt from The City Observed: Los Angeles, by Charles Moore, Peter Becker and Regula Campbell, New York: Vintage Books, 1984, pp. 8-10.

24. "Union Station" by Steve Harvey, Los Angeles Time, March 1, 1987, Metro Section, p. 1, 12.

25. "Los Angeles Union Passenger Station" essay by Dan Hoye, for the Los Angeles Conservancy, 1988.

26. "Tommy Tomson, A.S.L.A.", biographical sketch by Sheila Spencer, 1991.

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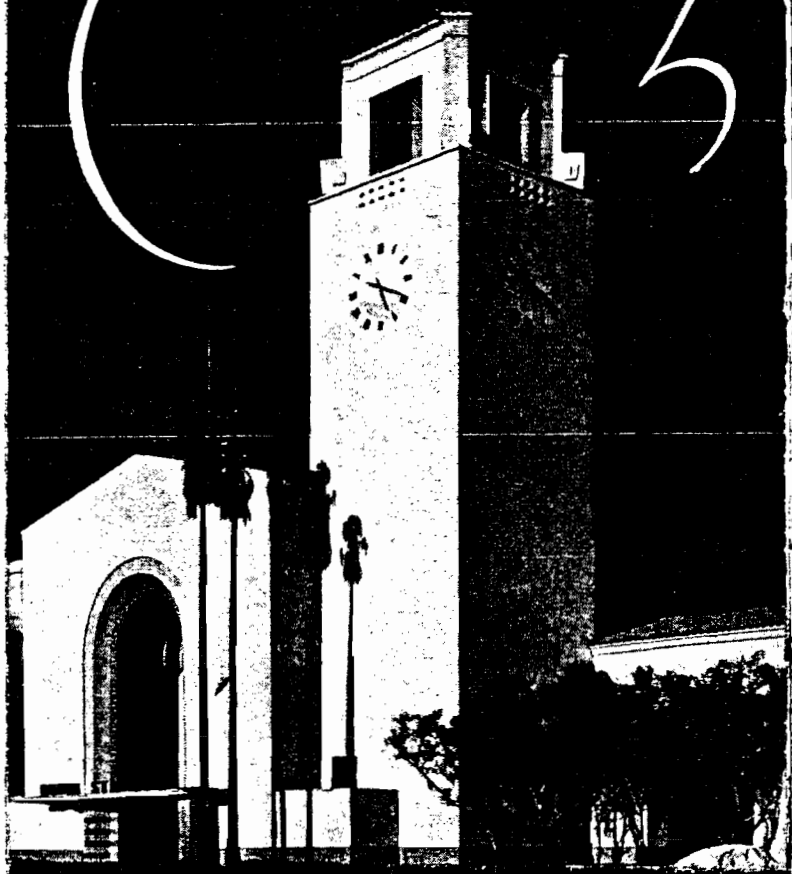
To acquaint you



with the new

LOS ANGELES
UNION STATION

To acquaint you

with the new

LOS ANGELES
UNION STATI

They have Streamlined the Pueblo

AND NOW, a few paces beyond the colorful old plaza of *El Pueblo de Nuestra Señora la Reina de Los Angeles* stands the railroads' contribution to the romantic progress that has made the Los Angeles of today—the new Los Angeles Union Station, which officially opened on Sunday, May 7th, 1939.

In presenting the new Los Angeles Union Station we give you America's newest and, we believe, most complete railroad terminal. Architecturally beautiful and typically Californian in aspect, the new station is both spacious and ultra-modern in every detail of equipment and design. Built at a cost of eleven million dollars by the three railroads which serve Southern California—Southern Pacific, Union Pacific and Santa Fe—the new station will offer an impressive and wholesome welcome to the stranger, and provide the people of Southern California with an institution that will serve them well for a long time to come. The physical setting of the entire achievement bespeaks the glamor of California. Here you will see trees—orange, olive, palm and pepper—rooted in native soil; flowers the year through—all blending so harmoniously with the man-made structure itself that you will believe the entire ensemble has always been there and as you see it today.

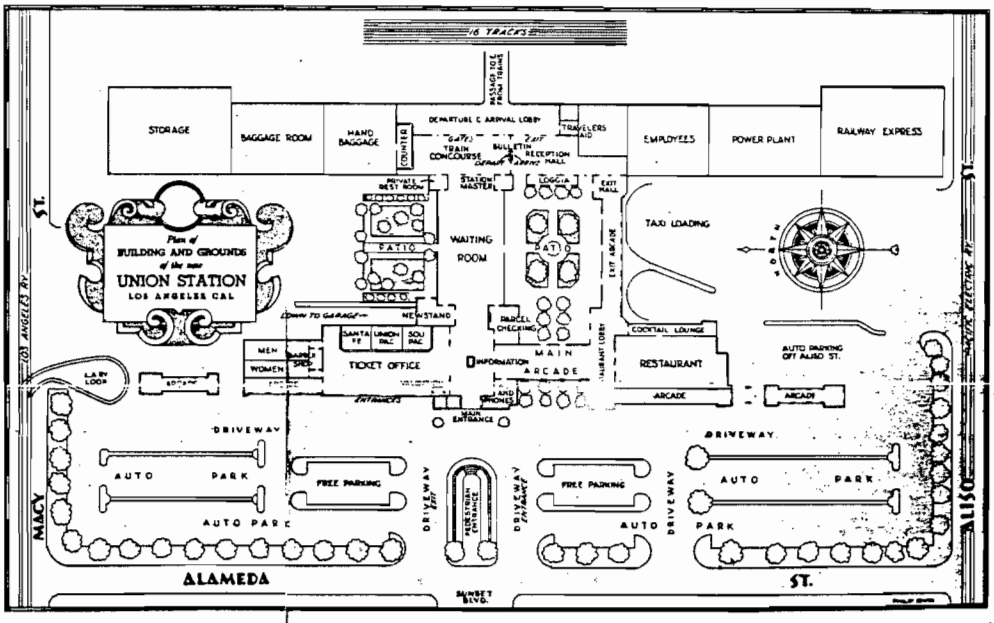
Buildings, tracks and ramps cover an area of 48 acres. The station building itself extends 850 feet along Alameda Street. The great entrance vestibule opens upon impressive halls with magnificently arched ceilings and mosaic floors created from marble brought from Vermont and Tennessee and far-off Belgium, France and Spain. These, artistically combined with Montana travertine are suggestive of immense carpets. Over-doors and window panels are created in French marble. Belgian black marble, tile wainscot and travertine form a border on the walls. Painted ceiling panels and trusses conform in tone and design. All woodwork throughout is fashioned from genuine American black walnut. Grilles are of wrought iron, bronze trim for doors and windows, with the balance of metal work in satin finish aluminum.

Along with its completely fascinating layout, the Los Angeles Union Station is also one of the most workable in facilitating the movement of traffic. Ten train gates open onto a wide, laned passageway leading to and underneath the tracks. Ramps lead upward to eight separate passenger loading platforms, each of which is bounded on both sides by a set of tracks. Thus is provided 16 sets of tracks, each capable of taking care of our longest trains. Besides these there are eight sets of tracks for mail, baggage and express, five additional sets of tracks for private cars, three engine release tracks, one storage track and six tracks for switching facilities—making a grand total of 39 sets of tracks.

All switches are controlled by an electric pneumatic interlocking plant, with the interlocking machine located in a three-story tower. The electric locking devices make it impossible to direct trains over conflicting or occupied routes. A modern loudspeaker communication system keeps levermen constantly advised of all train movements. Distant microphones permit approaching trains to identify themselves several minutes before they become visible.

Our Civic Center is close by; the Union Station will eventually be connected by a broad parkway with a group of monumental new buildings of the City, the County, the State and the United States Government. A terraced park, if present plans are carried through, will lead tourists directly into the picturesque historical quarter where Los Angeles began—the old Plaza, Church of our Lady Queen of the Angels, and Olvera Street, the quaint little street of Old Mexico atmosphere. The center of metropolitan downtown Los Angeles is but ten minutes ride from the Station; boulevards strike out in other directions to Hollywood, Pasadena, the beaches and residential districts.

We are very proud of our new Union Station and hope you may come soon and get acquainted with it.



Highlights

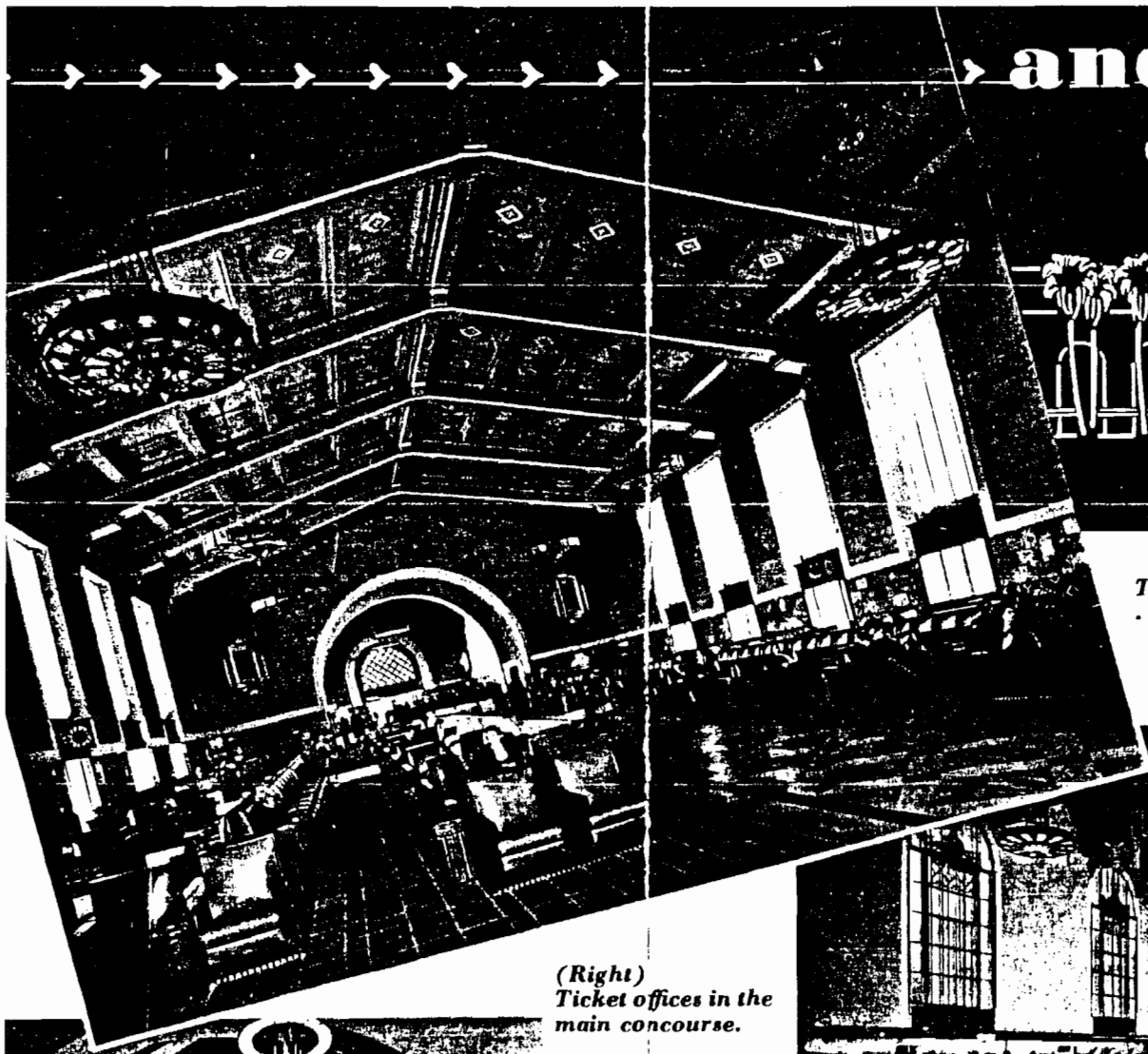
CONVENIENT LOCATION. The new Los Angeles Union Station is situated at 800 North Alameda Street, standing between Aliso and Macy streets, with the main entrance midway, facing Alameda. Its surpassing beauty of design is enhanced, if anything, by the arrangement of its working facilities and the intelligent application of these facilities toward the comfort of our patrons. TICKET OFFICES. The ticket offices of the three roads are in one large concourse, with three entrances from the Alameda Street side, in addition to the main central entrance, and one entrance off the south patio through the main vestibule. The ticket office opens into the main vestibule leading to the waiting room and train concourse, on the east side of which are located the train gates. The ticket counters of the three railroads are in one long continuous row, each road's portion being separated by partition and properly identified by signs. The Validating Bureau is located in the southwest corner of the ticket concourse, just inside the main entrance. Just a few steps inside the main front entrance is the Information Bureau, whose attendants are in direct communication with all departments. WAITING ROOM. A large, handsome waiting room connects the main vestibule and ticket concourse with the train gates. Announcements covering trains are made over a broadcasting system through loudspeakers. The marvelous acoustical treatment throughout the building insures a perfect reception of the broadcasts. Between formal announcements, and with intelligent supervision and judgment, there will be radio programs and recordings sent over the loudspeakers, all handled by an operator in the control room. Persons may be paged by this operator in any part of the station proper. OUTDOOR PATIOS. Just off the main waiting room, on each side, are colorful outdoor patios. There is a profusion of flowers, trees and vines in these patios, and comfortable benches. From the patios one may go directly to the train gates, into the main waiting room, the ticket concourse, the restaurant, or to the auto park and exits. DINING ROOM. A large, beautifully designed dining room is located off the main entrance, through an arcade to the south. This dining room is under the supervision of the Fred Harvey organization, a ready assurance of its high character. A neat cocktail lounge is adjacent to the dining room and is connected with the dining room by a center door. The lounge may also be reached through an entrance off the south patio.

Highlights

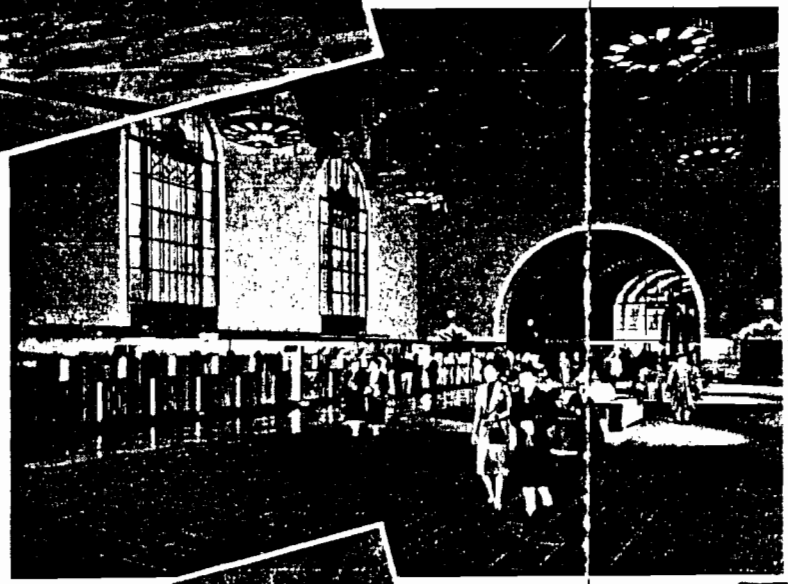
TO TRAINS. The ten train gates are on the east sid of the train concourse, just beyond the east end the main waiting room. The passenger subway lea from all of the entrance gates to the tracks, whi are reached off the subway by easy incline. All ou bound trains head north and incoming trains arri from the north side. Tracks all terminate at t south (Aliso Street) end of the station ground THE EXIT. Passengers arriving will exit throu the passenger subway which opens onto the sou patio, or may go out through the main waiti room. Taxis standing in a park just beyond t exit will take passengers direct from the sou arcade, out via Aliso Street. BAGGAGE ROO The baggage checking room, adjacent to the e end of the waiting room, opens onto the train c course near the departure gates. It is, likewise, j a few steps from the exit. MISCELLANEOU Other facilities handily located in the stati proper are: Western Union, public phones, par checking, news stand, soda fountain and toba shop; barber shop, lavatories and rest roo AUTOMOBILES. There are two automobile trances and one exit off Alameda Street and in and out passage on Aliso Street. There is pa ing for about 500 cars in the open park, an storage garage underneath the building with ro for 125 cars. The time by automobile from station to any of the downtown hotels is appr mately ten minutes under normal traffic co tions. STREET CAR SERVICE. The "N" Lin the Los Angeles Railway (city street cars) oper direct to the station into a loop at the north en the station grounds, off Macy Street. A uniform attendant stationed at the street car loop spe four languages—English, Spanish, French Italian. The running time of the street cars betw the station and Seventh and Broadway, the ce of downtown Los Angeles, is ten minutes, u normal conditions. Pacific Electric Railway i urban cars to and from points such as Pasad the San Gabriel Valley and places throughout territory operate over Aliso Street and will load unload at the corner of Aliso and Alameda str

The Los Angeles Union Station is new, and i modernity and completeness will be as new to row and for a long time to come. But, surroun and in many ways dominating this 1939 achi ment is an atmosphere of tranquillity and derstanding, clearly influenced by the s hospitality and tradition of the Californian days gone by, and this we hope will never cha

. . . and we built the Union Station

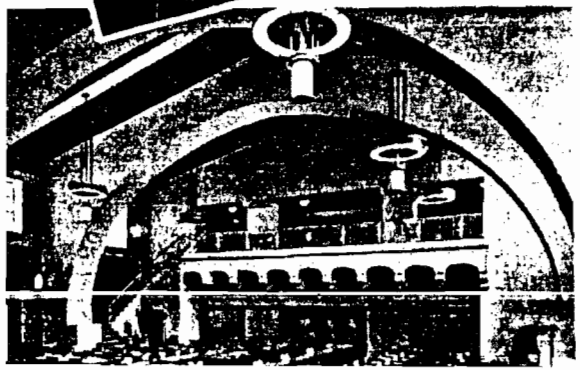


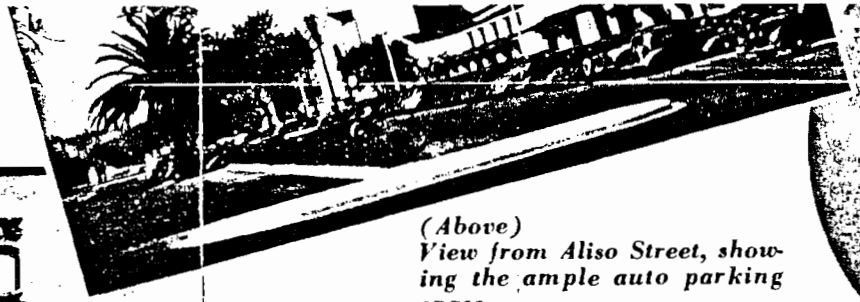
The waiting room . . . tranquil . . . dignified . . . magnificent.



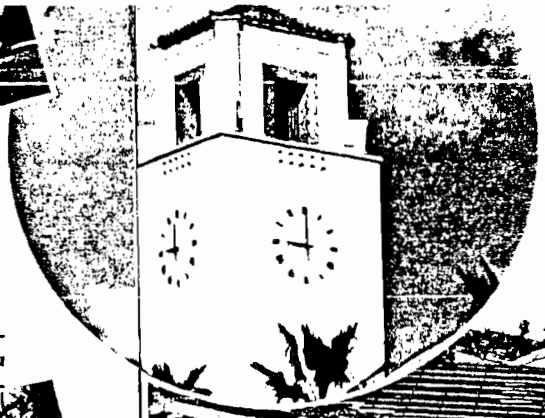
Night time in the south patio.

(Right) Ticket offices in the main concourse.





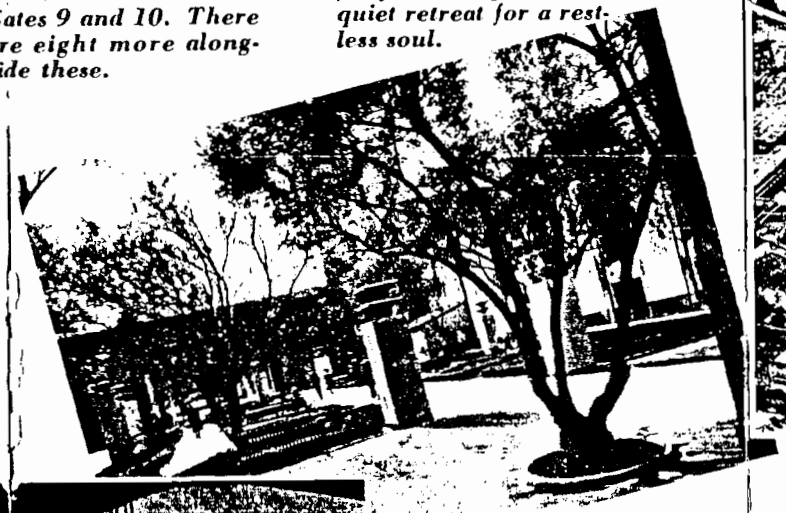
(Above)
View from Aliso Street, showing the ample auto parking space.

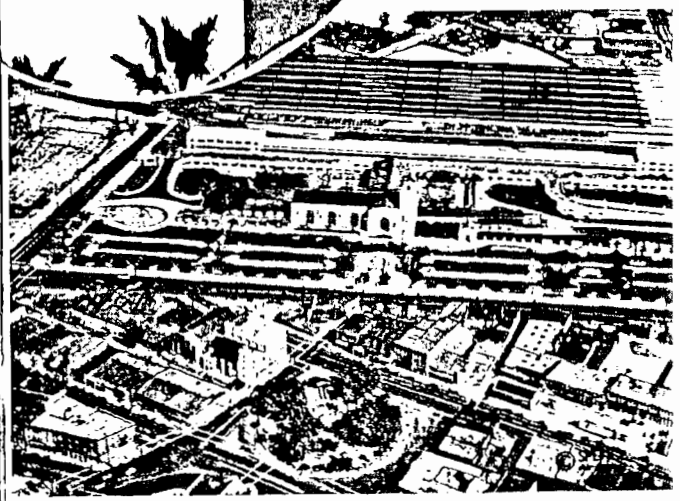


The tower rises 125 feet above the street.

Gates 9 and 10. There are eight more alongside these.

The patios are beautifully landscaped . . . a quiet retreat for a restless soul.

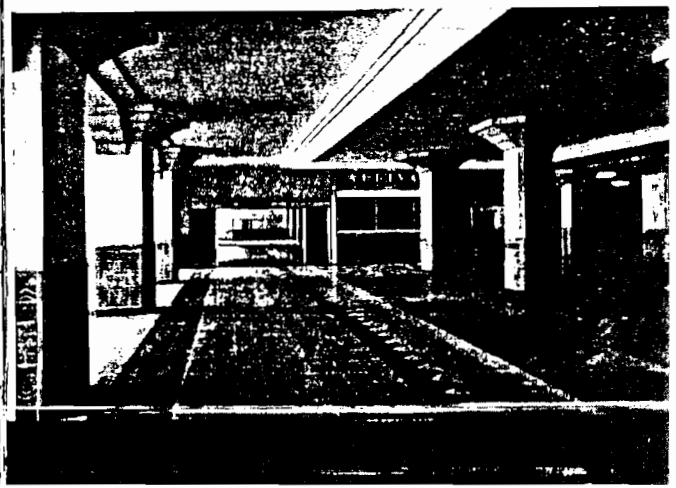


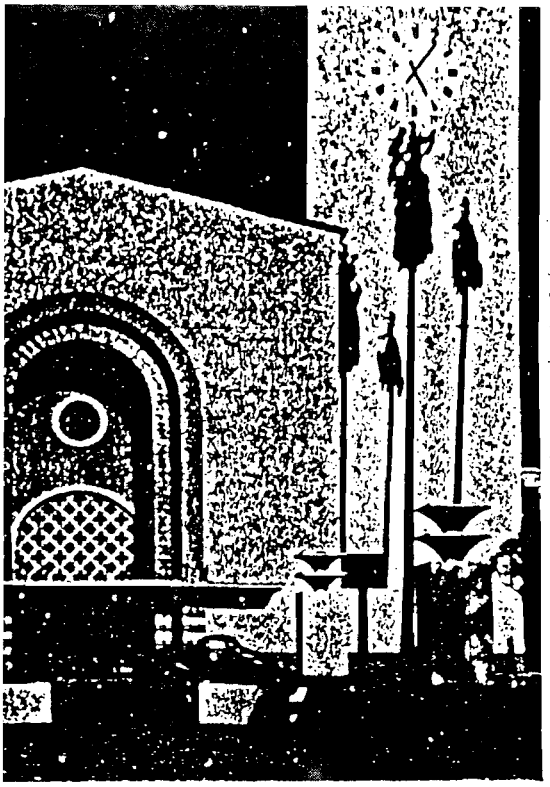


From above. The old plaza is in the center foreground.

Information Booth in the entrance vestibule. Ticket office to the left; waiting room on the right.

Reception Hall; the exit concourse. (Right)





he Main Entrance Presents a High Arched pening, Bordered with Mosaic Tile

Union Passenge at Los Angele

$11,000,000 facility of the Southern Pacific, the Sante Fe and the Union Pacific, including a spacious station in colorful Mediterranean architecture and an extensive signaled and interlocked track layout, ranks among the finest in the country

ON May 7, the Atchison, Topeka & Santa Fe, the Southern Pacific and the Union Pacific will place in service a new union passenger terminal at Los Angeles, Cal., that has been completed at a cost of more than $11,000,000. The opening of this terminal marks the completion of a project that has long been agitated in this community of 1,300,000 population. It ranks as the finest on the Pacific Coast and among the finest in the country.

The new terminal, of the stub-end type, but with elevated tracks parallel with the main axis of the station, is located on a 45-acre tract of land facing Alameda street, near the civic center of the city, in an arrangement which gives all of the roads easy access, and which removes railway operation along and across a number of streets. The station proper, of Mediterranean architecture in white-faced concrete, with colorful tile roof areas and exterior ornamenation, consists of a number of building units of irregular shape, size and height, which, flanked by arcades and pavilions, have a main frontage of 860 ft.

A feature of the station is that it sets back approximately 200 ft. from the street line, providing a wide expanse for drives, walkways and auto parking space, which affords a striking vista of the station structure, uninterrupted except by tropical landscaping and scattered ornamental electric lighting fixtures, including 34 Westinghouse Reflectolux junior luminaries. Other features of the terminal are its effective arrangement of passenger facilities to provide maximum convenience with minimum interference between incoming and outgoing passengers; the colorful decorative effects and acoustical treatment which are carried throughout the building interiors; the adequate provisions made for the handling of a large volume of baggage, mail and express with maximum efficiency and minimum interference with passengers; the streamlined, butterfly-type platform sheds which are of unique design and appearance; and the effective track layout approaching and within the termina area, fully signaled and interlocked to permit the mos expeditious handling of the many train and switching movements which will be required at this point. All o these features are described in this article.

Site Has Many Advantages

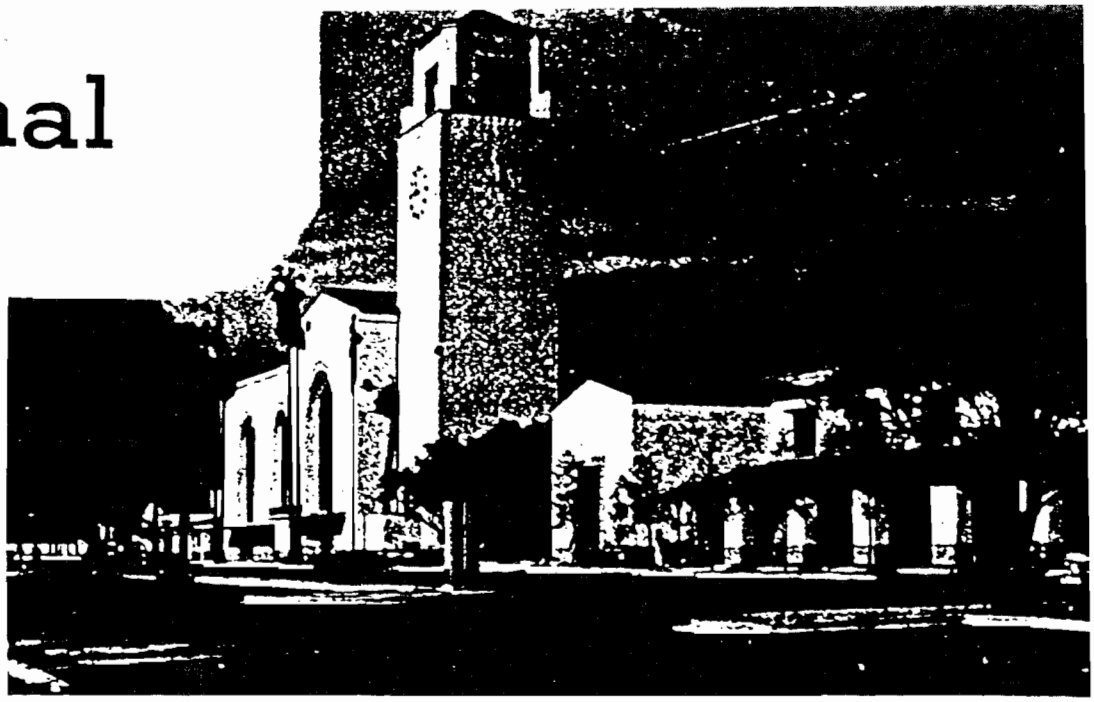
The new terminal replaces the Santa Fe's station a Santa Fe avenue and First street, and the Southern Pacific's station at the intersection of Central avenue an Fifth street, the latter station having been used also b the Union Pacific. It is located on what is known a the Plaza site, the old Chinatown of the city, and, ex clusive of the strip of land occupied by the approac tracks, covers an area approximately 1200 ft. long o each side between Aliso and Macy streets.

The use of the site for the new terminal required th razing of more than 50 one- and two-story buildings o various types, but it has the advantages of being clos to the recently developed civic center of the city and i close proximity to the lines of the participating roads Utilizing the Plaza site, however, required that the plat form tracks be located parallel with the station frontage a requirement which dictated that the plan adopted pro vide for a two-level arrangement, with the tracks at sufficient elevation above the station floor to permit passenger subway beneath them, with ramps leading t the platform level. The site in general required littl grading, but the elevated track layout, which lies abou 17 ft. above the general ground level, involved approxi mately 500,000 cu. yd. of filling and the construction o two long roadway underpasses of reinforced concrete rigid-frame construction, beneath the throat to the sta tion area. The most important of these structures, a Macy street, has a clear span of 68 ft. and is 505 f

Railway Age, 106 (1939), pp. 768-78.

Terminal

Cal.



The New Station Is of Mediterranean Architecture, in White-Faced Concrete, with Mission Tile Roofs and Colorful Decoration

long, carrying 25 tracks. The other underpass, at Vignes street, with a clear span of 68 ft., is 131 ft. long and carries seven tracks.

Striking Architectural Treatment

As already pointed out, the new station, reflecting the spirit and atmosphere of Southern California, is of Mediterranean architecture, with all that this implies in a rambling effect, with broken roof lines and colorful exterior and interior treatment. Set back across the spacious, landscaped approach plaza, the station presents a number of central building masses of irregular shapes and height, supported at each end by arcades and pavilions. All of the building units are white faced, with Mission tile roofs in variegated colors and irregular pattern. Adding to this pleasing treatment, all windows are provided with sectional steel sash painted Venetian blue, and all window and door reveals are accentuated with tan above red quarry tile sills.

The dominating group of the front elevation includes a high, arched-face entrance vestibule, a ticket concourse or lobby, and a clock tower which rises to a height of 125 ft., surmounted by a Moorish finial. To the left of this main group is a low, two-story office unit, faced by a lower arcade, and beyond this lies an ornamental driveway arch and a continuation of the arcade, which terminates in a low peaked-roof pavilion, about 375 ft. north of the main station entrance.

Immediately to the right, or south, of the main building group is a multiple-arch-faced arcade, known as the South arcade, 83 ft. long and 38 ft. high, which forms an undercover passage or promenade 33 ft. wide, to an attractive restaurant unit of 65-ft. frontage. This latter unit, which is two-stories high and comparable in appearance with the two-story office unit immediately north of the ticket concourse, is, like that unit, flanked along its face by an arcade; the arcade, interrupted only by a roofed-over, two-lane driveway into the rear station grounds, continuing to a terminal pavilion immedia adjacent to Aliso street. Thus, the main facade of station, with stepped-down roof lines and irregular backs and prominences each way from the center m extends continuously between Macy and Aliso streets.

On approaching the main entrance to the station, is not only impressed favorably with the general appe ance of the station as a whole, but becomes conscious the pleasing detailed treatment employed to carry the Mediterranean theme of architecture, which has b deviated from only as absolutely necessary from standpoint of practical considerations. The main entra presents an arched opening, 50 ft. high, bordered v mosaic tile in different shades of blue, gray-green burnt sienna, which rises above a reinforced conc cantilevered marquis, with the words "Union Stati across its projecting edge in bold, outlined letters. cessed from the arch face are five glazed entrance d in bronze frames and casements, and rising above doors is an arched panel of ornamental concretewo glazed with pattern glass.

Passing through the main entrance, one enters a ve bule 50 ft. wide and 80 ft. deep, with a high, arched ing and an unobstructed floor area except for a cen information booth. From here he can pass three w through broad openings to the main passenger facilitie the ticket or main concourse, the waiting room and restaurant. To the left lies the ticket concourse, largest individual unit, 146 ft. long by 80 ft. wide, v the ridge line of its roof 62 ft. above the floor le Here, except for a long ticket selling space along east wall and a few clusters of grouped settees, the fl area is unobstructed, and leads at the extreme north into a barber shop, rest rooms and toilet rooms, occu ing the entire first floor of the two-story office unit.

The ticket sellers space in the ticket concourse occu an area approximately 115 ft. long and 25 ft. deep, has a semi-open face above Belgium black marble plates, with walnut wickets at each seller's space.

Terminal Area, Showing the Track and Platform Facilities Directly Behind the Station Buildings

top of the ticket office is open, and the floor, of wood, is raised above the main concourse level on 2-in. by 8-in. joists. The purpose of this latter provision was to provide areas for electrical and ventilating ducts beneath the raised floor, while at the same time affording a warmer and more restful surface for the ticket clerks.

To the right of the entrance vestibule, a passage leads to the South arcade, referred to previously, which, in turn, provides direct access to the restaurant unit of the station. This arcade, which is 83 ft. long by 44 ft. wide, has a high, arched ceiling, multiple-arched faces, and a patterned red brick floor. The restaurant unit, presenting to the arcade a high, arched panel of sectional glass above glazed doors, has a floor area 62 ft. wide by 74 ft. deep for dining purposes, and a kitchen area 62 ft. by 64 ft.

Directly ahead of the main entrance vestibule, through a broad passage, the south side of which is flanked by parcel checking facilities and the north side by a news stand and soda fountain, lies the main waiting room. This room, the second largest passenger unit of the station, is 140 ft. long by 80 ft. wide, and its side walls, broken by wide square-top window panels, rise to a height of 36 ft. above the floor level. Here, the floor area is unobstructed except for group arrangements of leather-upholstered settees for waiting passengers.

Incoming and Outgoing Passengers Separated

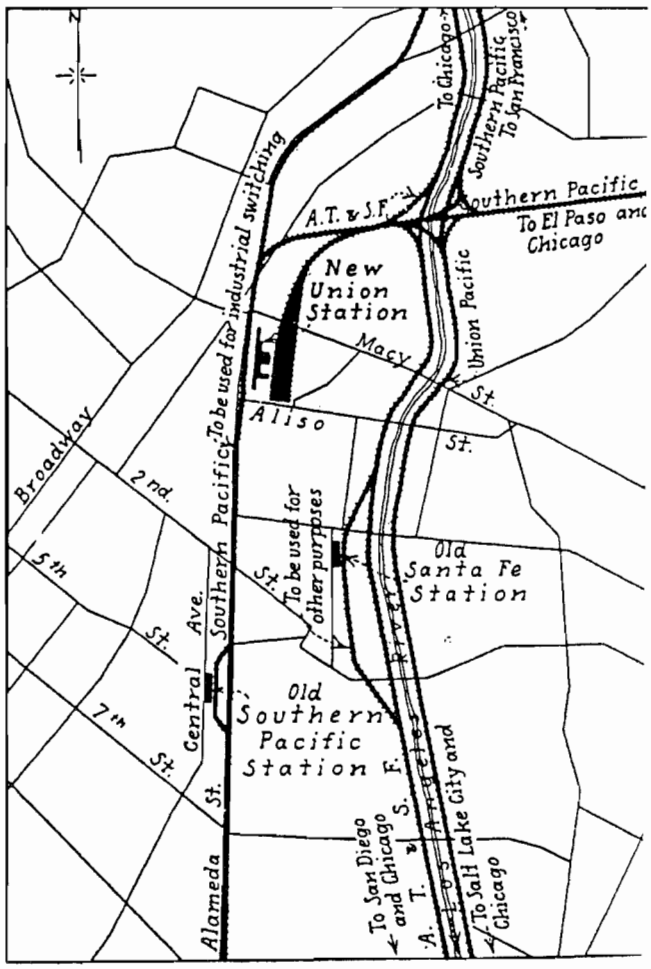
Beyond the east end of the waiting room is a train concourse and an incoming reception lobby, both of which, faced by a series of train gates, open into a departure and arrival lobby. From this latter area, an arched passenger subway, 28 ft. wide and 9½ ft. high at the crown, extends for a distance of approximately 500 ft. beneath all of the station tracks, serving each of the track platforms by ramps on grades of 12 per cent. The passenger subway, which was one of the first units of the terminal facilities to be constructed, to permit early filling operations for the elevated track layout, is a reinforced concrete, rigid-frame structure, comparable in design to the new Macy Street underpass.

In the train concourse—departure and arrival lobby arrangement adopted, departing and arriving passengers are completely separated, arriving passengers being directed through the separate reception lobby, which has no direct connection with the train concourse, the waiting room, or other main station areas. From the reception lobby, incoming passengers have egress either through an exit arcade, which leads directly to the taxi stand area at the south end of the station, or through what is called the South patio between the exit arcade and the waiting room unit, which leads directly to the front of the station through the South arcade.

The South patio, which is unique in passenger station construction, is an open area beautifully landscaped w full grown pepper, olive and palm trees, and paved part with brick in five shades of red, bordered with sn hedges and special plantings. Comparable with patio, there is a North patio on the north side of waiting room unit, a walled-in landscaped area, w access only from the waiting room. Here, within central area paved with flagstones, which will be u as a dining space, one may dine amid colorful gard spotted with orange, jacarandas, eucalypti, fig, avoc and oak trees.

Parcel and Baggage Checking

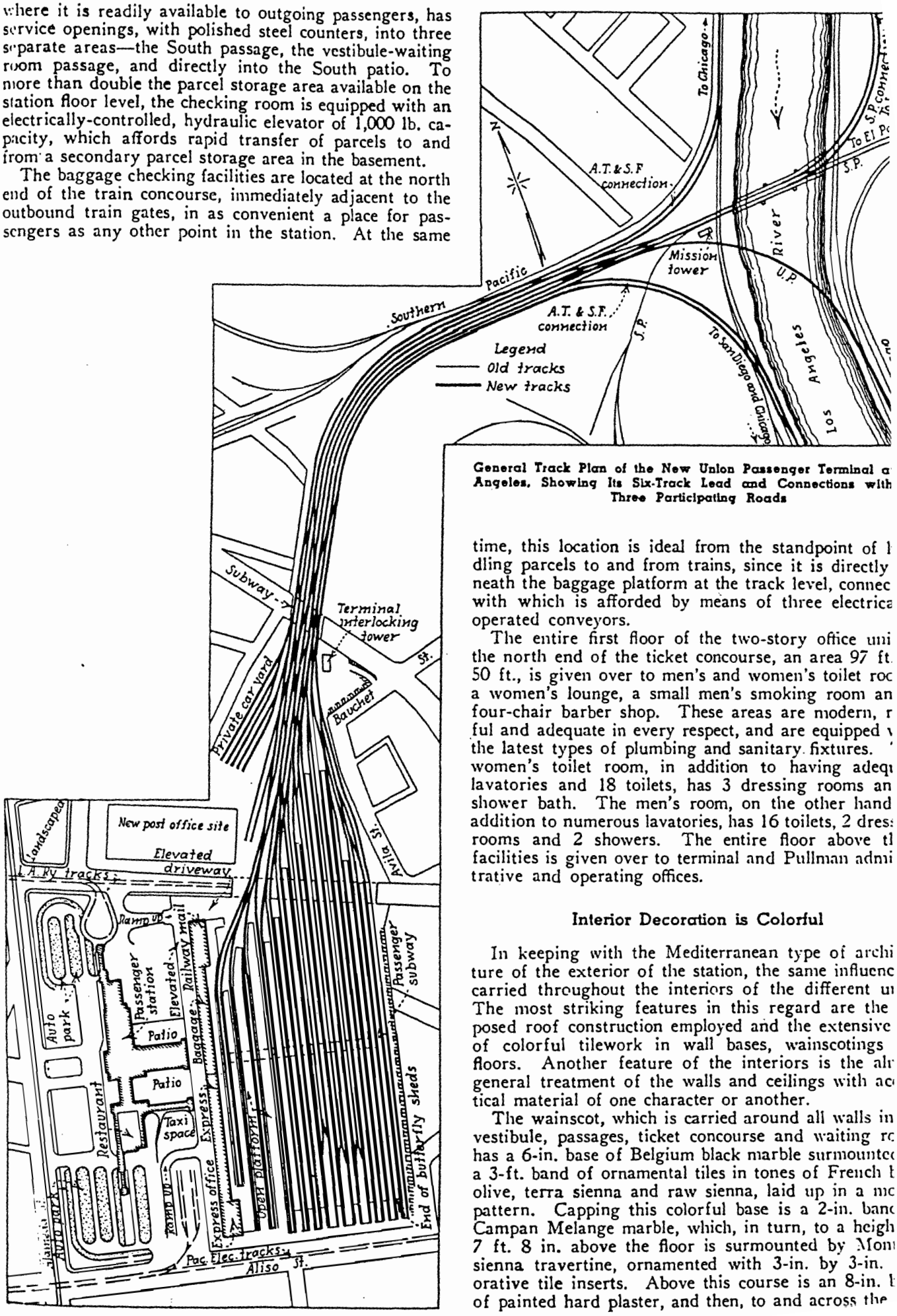
The parcel check room, located adjacent to the pass way between the entrance vestibule and the waiting ro



Sketch Map, Showing the Location of the New Union Pass Terminal at Los Angeles with Relation to the Lines and F Stations of the Participating Roads

where it is readily available to outgoing passengers, has service openings, with polished steel counters, into three separate areas—the South passage, the vestibule-waiting room passage, and directly into the South patio. To more than double the parcel storage area available on the station floor level, the checking room is equipped with an electrically-controlled, hydraulic elevator of 1,000 lb. capacity, which affords rapid transfer of parcels to and from a secondary parcel storage area in the basement.

The baggage checking facilities are located at the north end of the train concourse, immediately adjacent to the outbound train gates, in as convenient a place for passengers as any other point in the station. At the same time, this location is ideal from the standpoint of h dling parcels to and from trains, since it is directly neath the baggage platform at the track level, connec with which is afforded by means of three electrica operated conveyors.



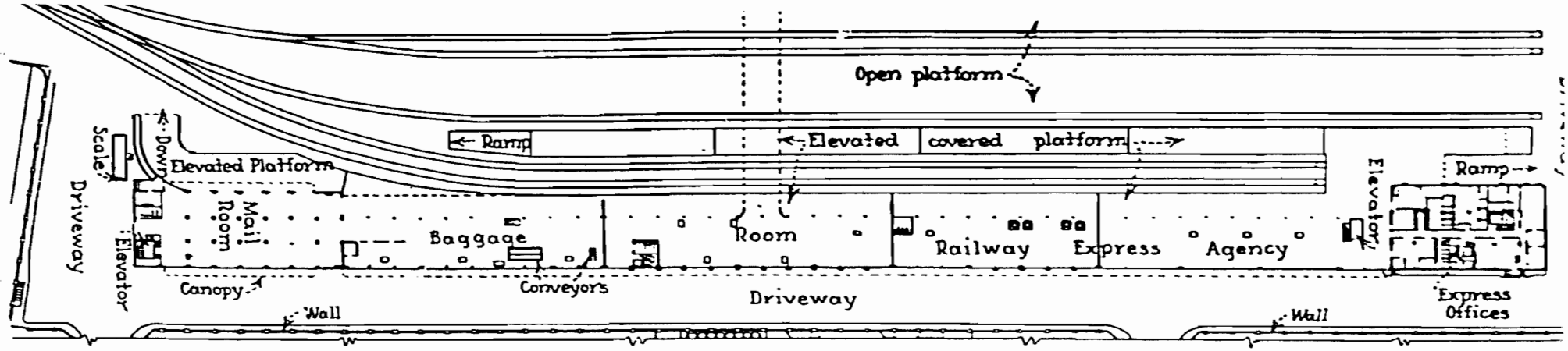
General Track Plan of the New Union Passenger Terminal a Angeles, Showing Its Six-Track Lead and Connections with Three Participating Roads

The entire first floor of the two-story office uni the north end of the ticket concourse, an area 97 ft. 50 ft., is given over to men's and women's toilet roc a women's lounge, a small men's smoking room an four-chair barber shop. These areas are modern, r ful and adequate in every respect, and are equipped v the latest types of plumbing and sanitary fixtures. women's toilet room, in addition to having adeq lavatories and 18 toilets, has 3 dressing rooms an shower bath. The men's room, on the other hand addition to numerous lavatories, has 16 toilets, 2 dres rooms and 2 showers. The entire floor above tl facilities is given over to terminal and Pullman admi trative and operating offices.

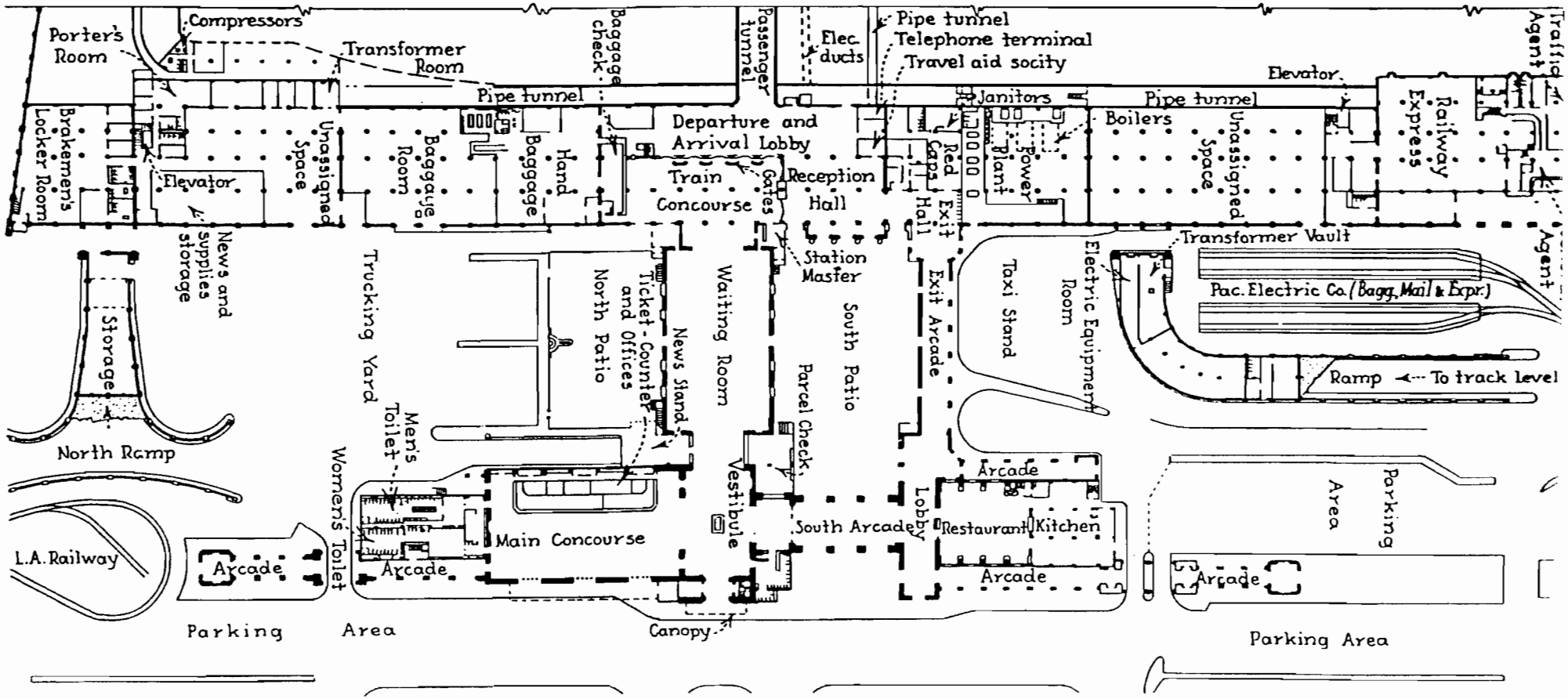
Interior Decoration is Colorful

In keeping with the Mediterranean type of archi ture of the exterior of the station, the same influenc carried throughout the interiors of the different u The most striking features in this regard are the posed roof construction employed and the extensive of colorful tilework in wall bases, wainscotings floors. Another feature of the interiors is the al general treatment of the walls and ceilings with ac tical material of one character or another.

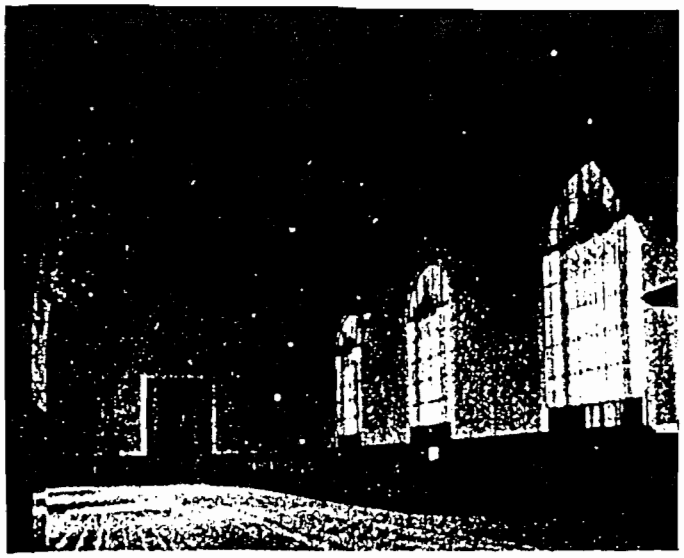
The wainscot, which is carried around all walls in vestibule, passages, ticket concourse and waiting r has a 6-in. base of Belgium black marble surmounte a 3-ft. band of ornamental tiles in tones of French b olive, terra sienna and raw sienna, laid up in a mc pattern. Capping this colorful base is a 2-in. banc Campan Melange marble, which, in turn, to a heigh 7 ft. 8 in. above the floor is surmounted by Mon sienna travertine, ornamented with 3-in. by 3-in. orative tile inserts. Above this course is an 8-in. b of painted hard plaster, and then, to and across the



General Plan of the Utility Building, at the Track Level, Showing the Areas Assigned for the Handling of Baggage, Mail and Express



General Plan of the New Union Passenger Terminal, Exclusive of the Track and Platform Facilities, Showing the Assignment of Space in the Various Building Units



Looking Into the Spacious Ticket Lobby, Showing the Unusual Features of the Ticket Counters, Roof Construction, and Window Ornamentation

ing, the interior is faced with acoustical material given a tinted finish.

In the ticket concourse, entrance vestibule and South passage, the wall facings are of Calicel, while the ceilings are finished with Acousti-Celotex. In the waiting room, the walls are faced with Rocoustic and the ceiling with Transite acoustic tile, while in the telephone rooms and in the passageway between the entrance vestibule and the waiting room, the walls and ceilings are faced with Acoustone. This latter material is also employed in the ceilings of the women's lounge, the arrival and departure lobby, the reception hall, and all of the areas on the second floor of the office unit.

Colorful Floors and Ceilings

The floors throughout the station areas are equally as colorful as the walls, being surfaced for the most part with patterned quarry tile in two shades of red, ornamented by marble borders and runners in a variety of materials, designs and color tones. In the South passage there is an 18-in. border of Cardiff green marble, while around the vestibule, ticket concourse and waiting room, the border, 31 in. wide, is of Verdi antique and Diamond C Tennessee marble. The most striking feature of the floors is a marble carpet, or runner, 11 ft. wide, which extends continuously through the longitudinal centerline of the entrance vestibule and waiting room.

Other features which add to the appearance of the interior are the large, arched window bays or panels in all of the larger areas; the large Spanish grill-work designs which decorate the window bays in the ticket concourse and waiting room; and the deep spandrels of Bois-Jardin marble, with veins of red and white in a mottled gray background, which are used above all doors and below all windows in the larger public areas. In both the ticket concourse and the waiting room, all of the main window panels are fitted with amber cathedral glass to soften the light admitted, and, in addition, are equipped with Venetian blinds to shut out the brilliant afternoon sun when desired.

Smaller Areas Equally Colorful

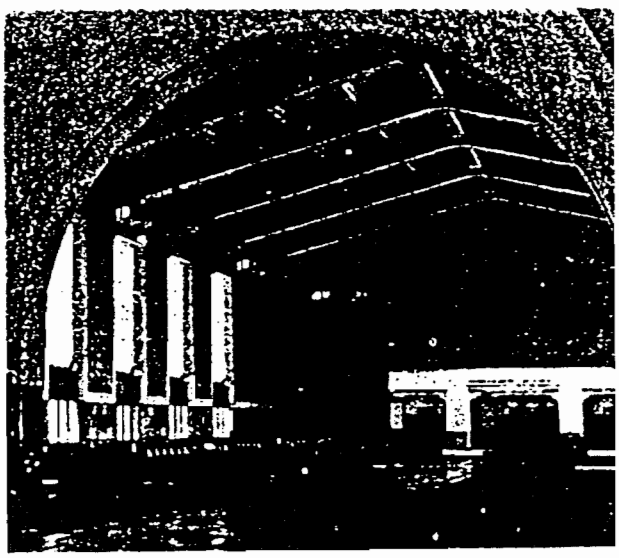
The smaller public areas of the station, such as the train concourse, departure and arrival lobby, reception hall, toilet rooms, women's lounge and restaurant, are finished and decorated in complete harmony with colorful effects employed in the larger public areas the train concourse, arrival and departure lobby an ception hall, the lower wall areas are faced with de tive tile in geometric patterns, and the floors are with Spanish tiles in various shades of tan, red, and black.

The restaurant departs in interior treatment from Mediterranean style and is designed in the Eight Century Spanish Provincial, modified, which is eq as colorful and yet makes for a more intimate fe This facility provides a main dining room which 27 at a U-shaped counter and 200 at tables and bo and a mezzanine dining room, which affords addit table space for 60. East of the main dining room cocktail lounge worked out in a modern manner, w bar, 17 private booths and 1 larger room designed cially for larger groups, accommodating in all 75. addition, a soda fountain luncheonette will seat 30, a separate lunch room provided for terminal emplo will seat 80.

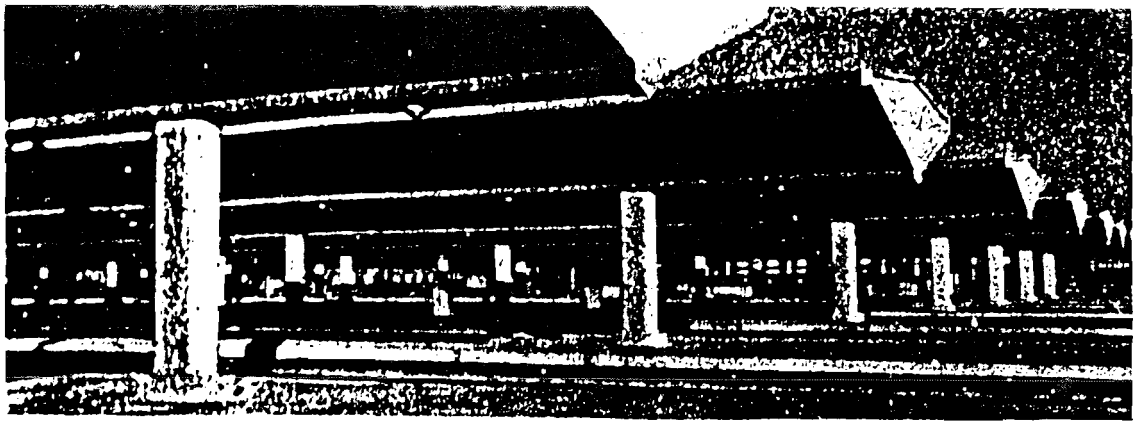
The main dining room floor is of patterned Val Spanish cement tile in red, black and buff. The have a wainscot of the same tile in buff with re surfaces, to a height of about 10 ft., above whicl run moulds of plaster, with the balance faced Acoustone panels separated by areas plastered wi textured stucco of cream color. The mezzanine di room has walls paneled with white pine in rar widths; the floor is carpeted throughout; and the ce is vaulted and has an Acoustone facing. In the coc lounge, the ceilings are also covered with Acoustone the floors are of paving bricks laid in herring pattern.

Heating and Lighting

Winter heating of the station buildings, as we the steam supply for car heating, is provided by n of three 325-hp. Babcock and Wilcox, four-drum w tube boilers, located in the basement and ground area of the utility building. All heating of the public areas is by the indirect method, employing cealed Vento cast iron heating units, large blower and a system of air ducts and inlet and outlet gr Except in the toilet rooms, fresh warmed air is fe through diffuser grilles in or near the ceilings, and



Looking Into the Waiting Room Toward the Train Concou the Rear—Note the Ornamental Lighting Fixtures and the A ment of the Leather-Upholstered Seats



A General View Through the Track and Platform Area, Showing the Streamlined Butterfly-Type Sheds, with All Structural Steelwork Obscured from View

cooled air is drawn off through outlets near the floor. Throughout the system, copper-bearing steel ducts were employed, all air is filtered, and the amount of heat supplied, and thus the temperature of the different areas, is thermostatically controlled.

Night illumination within and about the station is in keeping with the general type of architecture employed, calling for ornamental chandeliers or lighting standards, but effective use has also been made of panel, or strip lighting at a number of points, principally above the main entranceways and in the reception lobby and train concourse. Altogether, approximately 500 lin. ft. of this type of lighting is employed, consisting essentially of uniformly lighted bands of opalescent glass, usually about 24 in. wide, projecting approximately 5 in. below the ceiling.

In the high-ceiling entrance vestibule, ticket concourse and waiting room, Spanish-type ornamental lighting fixtures, 10 ft. in diameter, are suspended from the roof, there being six such fixtures in each of the two larger areas and two in the entrance vestibule. Exterior lighting about the station and through the approach plaza is provided for by approximately 50 lighting pedestals, or standards, in addition to about 20 bracket fixtures hung from the building faces.

A unique feature of the station is that the entire basement beneath the vestibule, ticket concourse and waiting room, involving approximately 27,000 sq. ft. of floor area, is designed for and given over to a garage and an auto parking space. This area, which will accommodate 125 cars, has a concrete floor, wide spacing of first-floor-supporting columns, and is equipped with a fan exhaust system to keep the air free from injurious gases.

It is reached by a two-way concrete ramp located directly alongside the rear of the ticket concourse, which has direct paved connection with Mack and Alameda streets.

Highly Flexible Track Arrangement

The track layout at the terminal, which, as already mentioned, is on a fill at an elevation of about 17 ft. above the station floor level, involves eight passenger platforms served on both sides by tracks. These tracks are spaced 13 ft. center to center between platforms and 31 ft. center to center across platforms, except for three pairs of platform tracks which are spaced 26 ft. center to center to make room for engine release tracks between them. These intermediate tracks are located between those platform tracks which have been assigned to incoming trains, and are equipped at their ends with split-angle, double-turnout connections to the platform tracks. Through this arrangement, the locomotives of incom trains can be cut off and sent to their respective engi houses without delay. This entire layout of passen platforms and tracks lies east of the baggage, mail a express facilities, which are served by six tracks for loading and unloading of head-end cars.

The embankment supporting the track layout, wh is retained on three sides by walls, was built largely fr spoil taken from building excavations in and about city. To insure its compactness, the material was pla in layers six to eight inches thick and was so thoroug solidified with sheep's foot rollers that it occupies proximately 20 per cent less volume in the fill that did in the excavation.

Unusual Platform Sheds

The platforms, which are of the low type, are 21 wide and range in length from a minimum of 1,00C near the sides of the layout to a maximum of 1,55C near the center where long through trains will be h dled. They are all of concrete construction, with suit expansion joints at intervals, and have a hard, smc wearing surface, sloped slightly each way from the ce for drainage.

Throughout their length, the platforms are covered butterfly-type sheds, the unique features of which their streamlined effect, in which all structural steelw is obscured from view, and the long spans of 80 ft. tween columns, offering minimum obstruction to the form area. To produce the streamlined effect, al the structural steelwork of the roof deck, including continuous trusses between columns and the cross fra is exposed on top and is completely enclosed ben with Robertson galvanized steel decking, the rib which add further to the modernistic lines prodi Adding further in this regard, all columns are encl in fluted sheet metal casings, surmounting con pedestals at the base. The column casings are pa dark gray, while the roof is painted light gray, w darker gray trim. The decks are self-draining thr the ribs of the decking to valley gutters provided a center-lines of the sheds, and the gutters are pit each way to downspouts at the column locations, v are enclosed within the column casings.

The underside shed deck arrangement also obscur of the electric wiring conduit leading to shallow-set ing fixtures along the center ridges of the sheds. T fixtures, of which there are a total of 514 throug the platform area, are spaced approximately 20 ft. between columns, and are fitted with special light-d ing lenses.

The three roads using the new terminal are given access to it from the north over a six-track lead extending from points of connection with their respective lines along the banks of the Los Angeles river, approximately one quarter mile north and east of the station. This lead, through a carefully designed arrangement of turnouts, crossovers and double-slip switches, connects with the station tracks in such manner that trains of any of the roads can be routed from any track in the lead to any station track, and vice versa. The terminal lead also serves a five-track private car yard with capacity of 19 cars lying on the north side immediately at the throat to the station platform tracks.

In the lead, the special trackwork includes 62 turnouts, most of which are equipped with solid manganese, self-guarded frogs and Samson switch points; 26 double-slip switches, largely with solid manganese, self-guarded frogs and Samson points; and three solid manganese crossings and one movable-point crossing. In addition, the special trackwork at the terminal includes three split wye switches at the ends of the engine release tracks between the through-train passenger platform tracks. These latter switches are equipped with Pettibone Mulliken oil-buffer-type spring switch mechanisms, so that when making moves to the engine release tracks, no switch-stand operation is necessary at the center tracks.

With only one or two minor exceptions, all of the rail and special trackwork throughout the lead and throat is of new 112-lb. section, and all of the tracks employ 100 per cent joint bars. Hipower spring washers, new treated ties equipped with Lundie tie plates, Modified Fair rail anti-creepers (from 6 to 16 per panel as necessary) and are supported on a heavy section of stone ballast. Furthermore, all of the treated ties of the curved track leads are equipped with Southern Pacific standard curve gage plates. Practically all of the special trackwork was furnished by the Pettibone Mulliken Corporation, and the Ramapo Ajax Division, American Brake Shoe & Foundry Company (formerly Racor Pacific Frog & Switch Company).

Insuring the stability of the tracks still further, both throughout the throat and within the platform area, all of the tracks are thoroughly sub-drained by lines of corrugated iron drainage pipes, ranging from 8 to 12 in. in diameter. Directly at the station, south of the Macy Street underpass, the drainage is effected by means of two independent systems, one on each side of the passenger subway which provides access to the station platforms. In each of these systems, single lines of 8-in. corrugated pipe extend longitudinally between tracks, and all of these lines, which collect the platform shed as well as the track drainage, extend to an intercepting cross drain of 24 and 30-in. reinforced concrete pipe. The cross drains of the two systems connect with a 36-in. reinforced concrete pipe along the east side of the station grounds, which carries all of the runoff to a sto water sewer in Macy street.

In a more or less similar arrangement, the track th for a distance of 500 ft. or more north of Macy stre completely subdrained, each group of tracks in this being underlaid with at least one line of 8-in. or 1(corrugated pipe, with such laterals as are necessary provide for special drainage conditions. In the en sub-drainage system at the terminal, more than 63, lin. ft. of pipe was employed, including approxima 27,000 ft. of corrugated iron pipe of the sizes n tioned.

Fully Signaled and Interlocked

With the heavy train movements that the new term will be called upon to handle, the most careful c sideration was given to the signal and interlocking fa ties to speed up operations and to prevent delays to t and switching movements. Thirty-four passenger tr are scheduled to arrive at Los Angeles, and an e number to depart, on certain days. Some of these tra such as the Santa Fe "Super Chief" and "El Capit and the Union Pacific streamliner "City of Los Angel are operated every second or third day. As the sta layout is stubbed at its south end, all arriving and dep ing trains, empty equipment, and light engine moves well as switching moves to handle head-end cars tween trains and the mail baggage and express build must be made through the track throat at the north of the layout. Operation will be further complicate the fact that train movements are bunched in cer morning and evening hours. On the average, about moves will be made through the throat in the hour tween 8 a. m. and 9 a. m., and about 57 moves betw 8:30 p. m. and 9:30 p. m.

The interlocking directly within the terminal are of the electro-pneumatic type, employing a Union Sw & Signal Model-14 machine with 138 working le Fifty-four levers control 104 electro-pneumatic sw machines and 50 levers control 83 interlocking sig

By using searchlight-type dwarf signals, except c bridge at the north throat, it was possible to so locate signals that the tracks may be utilized to the best ad tage in handling trains and switching moves. The nals operate to display three aspects—red, yellow, green—and in effect operate as automatic block sig for trains traversing routes within the interlocking lir

All tracks within the terminal are signaled for t movement in both directions. In order to close second train on a station track which is already occu as well as to facilitate switching moves, the last so ward dwarf signal in a route to a station track ca cleared to display a yellow proceed aspect, when the tion track involved is occupied. These last southw

Looking Toward the Terminal Over a Part of the Highly Flexible Track Arrangement Provided—Note the Terminal Interlocking Tower at the Left

Looking North Along the West, or Driveway Side, of the Large Utility Building, at the Track Level, Showing the Three-Story Section at Each End

signals leading to the station tracks involve no conflicting routes.

A six-track lead from the north end of the station layout and interlocking extends around a 9-deg curve 700 ft. long to Mission Junction interlocking, where the lines of the individual roads connect with the lead, the distance between the home signals of the two plants being 950 ft. All train and switching moves into or out of the terminal use this lead and must pass through Mission Junction. In order to utilize the lead between the two plants to the best advantage in handling peaks of either inbound or outbound moves, the six tracks are signaled for train movements in both directions and controls are established by a traffic-locking system set up by co-operative action on the part of towermen in the two towers.

Mission Junction Interlocking

At Mission Junction, additions to the track layout to connect the six-track lead with the lines of the various roads include three double-track and one single-track connections in addition to numerous turnouts and crossovers, so arranged that trains can be routed in either direction on all tracks. At this point, a new 104-lever section was added to the existing 144-lever General Railway Signal unit-lever electric interlocking, and the entire plant was reconstructed to include the additional power switches and signals. Of the 195 working levers, 94 are used to control 12 derails, 28 turnout switches, 6 double-slip switches and 2 turnout switches with movable point frogs, and 16 crossovers, while 96 levers control 96 signals, and 5 levers control 9 electric locks on switches that are not used frequently enough to warrant the expense of interlocking and handling from the tower. As a special means of facilitating following train movements on through routes, all of the signals in the route, except the first signal governing entrance to the plant, can be made non-stick by pushing a button below the signal lever.

Alternating current for both the terminal and Mission Junction interlockings is received from two sources to avoid the possibility of a power failure. However, if a failure should occur, the towerman at each plant can immediately cut in a Westinghouse gasoline-engine-driven generator emergency unit which will supply the necessary power for operating the plant.

At both plants the wiring exterior to the towers is in underground cable except for a span across the Los Angeles river. No metal is used in the outer protection of this cable. Approximately 50 per cent of the insulated wire and cable at the two plants has the mummy-type finish, and was furnished by the Kerite Insulated Wire & Cable Company, while the remainder has Okosheath outside covering and was furnished by the Okonite Company.

There is a microphone and loud speaker system of communication between the Terminal and Mission Junction towers, which enables the levermen at these two points to converse from any point at either interlocking machine. Because of the microphones, it was necessary to give both lever rooms an acoustical treatment. At Mission Junction a system of whistle repeaters was installed whereby approaching trains announce their approach, character and destination. This is accomplished by means of microphones located at considerable distance from the tower and by loud speakers located within the tower.

Baggage, Mail and Express Facilities

One of the most effective features of the new termin is the accommodations afforded for the handling of baggage, mail and express with maximum convenience and efficiency, while at the same time isolating them so th they do not mar the appearance of the passenger facilities or interfere in any way with passengers. These accommodations are located at the track level between the station proper and the first platform track, and involve essentially the long, one-, two-, and three-story utili building; a car-floor-height covered working platform six mail, baggage and express car tracks; and three wi paved driveways which serve all of these facilities a have ramp connections to the street level at both ends the station site.

The primary unit of these facilities is the utility bui ing, which is 1,227 ft. long by 90 ft. wide at its stre or ground-level floor, and 806 ft. long by 40 ft. wide its track-level floor, with a three-story section, 162 long by 60 ft. wide at its north end for railroad mail telephone exchange, telegraph operators, and for c ductors' and Pullman rooms; and a three-story expr office unit 121 ft. long by 65 ft. wide at its south e The first story of the building is of reinforced conc construction, and is of such area that its upper deck only carries the smaller second and third floors, but affords space for a wide uncovered driveway along west face and around both ends of the upper floors the track level. This driveway has a ramp connec down to Macy street at the north end, and a second r down to the level of Aliso street at the south end. I thermore, through its extension around the buildin its south end, it has connection with two other wide crete driveways on the east side of the building, w are served by four head-end car loading and unloa tracks. Thus, utilizing the first story roof of the b ing in part for a driveway, wide flexibility of truc operations is permitted about the track-level facil

with almost as much ease and convenience as though they were located at the street level.

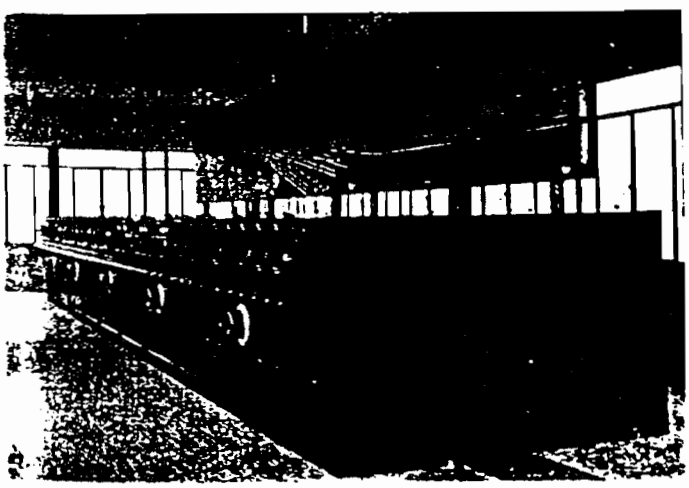
The entire driveway area about the baggage, mail and express facilities at the track level, including the two ramps leading to the street level, are adequately and attractively illuminated for night operation by 50 Westinghouse octagonal senior bronze luminaires and 21 octagonal junior pendants.

The space utilization or assignment of the ground floor of the building is essentially the basis for the term "utility building". Here, centrally located, are the passenger train concourse, the departure and arrival lobby and the incoming passenger reception hall, while immediately to the north are the hand baggage checking space and a large baggage room, and immediately to the south are porter's quarters, a janitor's room, Travelers' Aid office, news-press room and the terminal power plant. At the extreme south end, forming the ground floor of the three-story railway express section, are offices and public reception areas of the express agency, while the extreme north end area is assigned to news and supplies storage, brakemen's and Pullman porters' locker rooms, Pullman supply space, and for housing transformers.

Large Track-Level Platform Area

The building at the track level, except for the upper stories of the three-story units at the ends, is essentially a covered trucking platform with a steel frame superstructure, closed in on both sides by rolling steel doors, surmounted by continuous panels of sectional steel sash. This platform, of concrete construction with a Master Builders Metalicron floor hardener wearing surface, is given over entirely to baggage and express handling, the north end being occupied by the former and the south end by the latter. The main roof over the platform consists of a series of light steel trusses supporting a laminated wood deck which is covered with three-ply built-up roofing. This is extended out a distance of 7 ft. on the driveway side by a canopy to protect truck loading and unloading operations, and on the track side a distance of 20 ft. by a similar canopy to protect car loading and unloading operations. Both of these canopy extensions are supported from the building faces by steel truss brackets, enclosed on the underside instead of on top by Truscon galvanized Ferrobord, to give the same streamlined effect as the passenger platform sheds.

The two upper floors of the express unit at the south end of the building are of reinforced concrete construction throughout and are used exclusively for exp offices. The upper floors of the mail unit at the n end are used only in part for handling mail. The ond, or track-level floor, except for a small yardmast office, is an open expanse for the transfer of sacked and parcels between trucks and cars, and vice versa. here the floor is finished with a Calrock asphalt b wearing surface. Wide doorways are provided on sides, fitted with rolling steel doors and overhang canopies. The third floor, on the other hand, is divi into various size areas used as a telegraph and teleph office, railroad and Pullman conductor's rest and lo rooms, a Pullman agent's office, storage space an railroad police headquarters. The roofs over both these units are of flat-slab construction, protected three-ply built-up felt and asphalt roofing.



The Interlocking Machine Directly at the Terminal, Located in a New Three-Story Tower, Is of the Electro-Pneumatic Type, with 138 Working Levers

Steam Supply and Power Distribution

All of the steam requirements at the terminal building, car and hot water heating are furnished by three 325-hp. water-tube boilers (with rating of per cent) housed in the power plant area on the gro floor of the utility building. These boilers, which natural-gas-fired, with an oil-fired standby unit, hav maximum pressure rating of 250 lb., but are operate a working pressure of 150 lb. A feature of the bo installation, to preclude the use of a high, natural-d stack, which would have been unsightly, is the indu draft system employed, utilizing draft fans driven b steam turbine. This arrangement required stacks wh extend only about three feet above the shed roof of utility building.

The principal auxiliary equipment in the power p includes a Zeolite plant, which supplies de-aerated softened water to the boilers; two boiler feed pumps hot water supply boiler, heated by exhaust steam; three hot water circulating pumps. Other mechan equipment about the terminal includes two chilled wa pumps for distributing the drinking water supply, two Worthington air compressors, each of 500 cu. ft. min. capacity, one electrically driven and the other ste driven, which supply air for the pneumatic tube sys of the terminal, for the operation of all of the pow operated track switches, and for train testing.

The Electrical System

Electric power for station lighting and other purpo is purchased from the Bureau of Power and Light of city and is brought into the terminal in two prim cables as 4,800-volt, 3-phase, 60-cycle current. The m distributing board is located in a vault under the so ramp to the utility building, and from here eight prim feeders radiate to five distributing points located s tegically about the terminal property. The train y distribution is handled through two Westinghouse de front, dead-rear combination carbon and De-ion brea switchboards located in one of the distributing vau The five distributing points, each with a transform have an aggregate current capacity of 2,880 k. v. a.

A feature of the electrical system is that each senger platform, along both sides, is equipped with po outlet receptacles at 80-ft. intervals for operating the conditioning motors on coaches and Pullman cars w they are being prepared for outbound movements. Th receptacles, of which there are a total of 216 through platform area, supply 220-volt, 60-cycle, 3-phase curr The power supply to this system of outlets is arran so that 140 of them may be used simultaneously.

Another feature of the electrical system is the

vision of battery-charging outlets in both the baggage, mail and express-handling area and the private car "hold" yard, there being a total of 18 in the former area and 19 in the private car yard. All of these outlets, equipped with waterproof receptacles, are located in the concrete driveways about these areas.

Details of Building Construction

All of the larger station buildings are of reinforced concrete construction, on concrete pipe foundations, and throughout their design special care was given to the reinforcing and other details to insure against damage in the event of seismic disturbances. At many points special diagonal bracing and horizontal struts were incorporated to help resist the horizontal stresses produced by earthquakes, and to tie the individual units together securely, a feature which has been found particularly desirable in earthquake-resistant construction.

At the same time, complying with the requirements of the Pacific Coast building code, each of the individual building masses was made structurally independent of adjoining masses through the medium of wide expansion joints, closed by fragile facings where desirable for appearance, or, where in the floors, by special metal slide plates. The width of these joints varies from two to four inches, the larger openings being provided between the larger and taller units.

This precaution was felt to be particularly desirable where units of varying height and mass were involved, but it was also carried into the utility building construction, which, despite its general appearance as a single continuous structure, is divided into seven completely independent units by means of six, four-inch open joints. Another feature employed in the interest of earthquake-resistant construction, was the use of diagonal roof sheathing.

In spite of the generally good foundation conditions which prevailed over the station area, due to the presence of river sand and gravel, all of the main building units were given support on 1,008 poured-in-place concrete piles, varying in depth from 10 to 30 ft. below the basement level, depending upon ground conditions and the loads to be supported. Beneath wall areas generally, one to three lines of piles were employed with concrete mats cast in place, except at main column points, where the piles were arranged in clusters to afford adequate bearing capacity.

The only exceptions to the use of straight, poured-in-place piles was the use of Bertram piles with belled-out bases for foundation support of the Aliso Street retaining wall and the utility building.

In all of the extensive concrete work involved in the building units, Douglas fir plywood forms were used, a total of approximately 150,000 sq. ft. of 5/8-in. plywood panels being employed for this purpose, in addition to 500,000 ft. b. m. of other form lumber. The most unusual feature in this connection was the use of Celotex board form linings on all exposed surfaces, the purpose of which was to reproduce in the concrete face the faintly mottled effect of the Celotex surface itself. Approximately 100,000 sq. ft. of 1/2-in. Celotex board was used for this purpose.

Employing this type of lining to produce the surface finish desired was an expedient developed by those in charge of the work, and, because of the character of the material, which will absorb moisture, considerable experimentation had to be done before its use was practicable. It was finally developed that the Celotex made an excellent lining material, without excessive absorption of moisture from the concrete or a tendency to adhere to the concrete surface, if given a single coat of boi linseed oil within a few hours before the concrete v placed. However, the lining could be used only once.

After the forms were removed and the Celotex lin stripped from the face, light brushing was usually s ficient to remove any trace of the fibre texture wh might have adhered to the concrete. At this time al such minor lining joint marks as might appear w carefully removed. Later, at the proper stage in curing of the concrete, it was painted an "off whi with two coats of either of two specially prepared Pc land cement concrete paints, one known as Cemel which was used principally on the front faces of station building and the tower, and the other, kno as Bondex, which was used elsewhere.

Track Adjustments and Coach Yards

As might be expected, adapting their present tr layouts within the city to fit in with operations at new terminal required a considerable number of tr adjustments on the part of all three roads involved. also brought about, as one of the features of the proj the abandonment for passenger service of several th sand feet of Southern Pacific tracks in Alameda str these tracks to remain and be used in the future f for industrial switching at night. The major track justments necessary by the three roads occurred i Mission tower, along the Los Angeles river, where t were required to build connections with the lead to terminal. The Santa Fe, with its main tracks on west side of the river, built a wye connection with lead, entirely on solid ground, but the Union Pac with its tracks on the east side of the river, was quired to construct a bridge crossing for its connec The Southern Pacific already had a double-track br at this point, carrying its El Paso line, but this br had to be altered materially to adapt it to a new dc track connection leading to and from the north.

For the time being, at least, both the Santa Fe the Union Pacific plan to use their existing coach y the facilities of the former road being located in vicinity of its old passenger station, at Eighth st while the latter's facilities are located at Hobart, a six miles south and east of the new terminal. Southern Pacific, on the other hand, because its exi coach yard at Eighth and Alameda streets is acce to the new terminal only by a circuitous route invo numerous grade crossings, has built an entirely new ern coach yard at the site of its car repair shops o east bank of the Los Angeles river, with close co tions with the new terminal.

Work Directed by Committees

The new Los Angeles Union Passenger Termina constructed under a plan dividing the ownership of the participating roads on a modified use basis per cent to the Union Pacific, 33 per cent to the Fe and 44 per cent to the Southern Pacific; the ope expense being on a use car basis of 12 per cent Union Pacific, 33 per cent to the Santa Fe and 5 cent to the Southern Pacific.

The project was developed as to general plans tribution of costs and consummation of agreemer committees, each consisting of one representative each road. The committees formulated included of presidents, vice presidents, general managers, engineers, attorneys and land agents. The exe officers delegated authority to the Board of Ma

(*Continued on page 786*)

(Continued from page 778)

and Engineering committee to construct the project, the latter committee having authority to create additional sub-committees. The Board of Managers consists of J. R. Hitchcock, general manager, Santa Fe, Coast lines (chairman); L. B. McDonald, general manager, Southern Pacific, Pacific lines; and W. H. Guild, general manager, Union Pacific, South-Central district. The original chairman of this Board was F. H. Knickerbocker, now assistant to president, Union Pacific, and a former member was A. T. Mercier, now vice president of the Southern Pacific. The Engineering committee, which has directed all of the construction work, is composed of M. C. Blanchard, chief engineer, Santa Fe, Coast lines (chairman); W. H. Kirkbride, chief engineer, Southern Pacific, Pacific lines, represented locally by J. C. E. McClure; and L. T. Jackson, representing B. H. Prater, chief engineer, Union Pacific system. Sub-committees appointed by the Engineering committee consisted of the following:

Architectural: H. L. Gilman, Santa Fe (chairman); J. H. Christie, Southern Pacific; and R. J. Wirth, Union Pacific; architects for their respective lines.

Signal and Interlocking: E. Winans, Santa Fe (chairman); R. D. Moore, Southern Pacific; and A. H. McKeen, Union Pacific; signal engineer of their respective lines.

Electrical-Mechanical: Paul Lebenbaum, electrical engineer, Southern Pacific, Pacific lines (chairman); A. B. Young, electrical engineer, Santa Fe, Coast lines; C. P. Kahler, electrical engineer, Union Pacific system; C. A. Losh, mechanical engineer, Southern Pacific, Pacific lines; and P. C. Kangieser, assistant engineer, Santa Fe, Coast lines. A former member of this sub-committee was U. S. Attix, now general fire inspector of the Southern Pacific.

Communications: A. W. Flanagan, superintendent of telegraph, Southern Pacific (chairman); T. P. Brewster, superintendent of telegraph, Santa Fe; and C. J. Steinel, assistant superintendent of telegraph, Union Pacific.

All of the actual construction work at the terminal has been under the immediate direction of A. J. Barclay, construction engineer, and S. V. Meigs, assistant construction engineer. John and Donald B. Parkinson of Los Angeles, have acted as consulting architects.

The general contractor on the terminal project was Robert E. McKee, Los Angeles. All of the structural steel was furnished by the Consolidated Steel Corporation, Ltd., Los Angeles, while the large amount of reinforcing steel involved in the work was divided between the Bethlehem Steel Company, Bethlehem, Pa.; the Blue Diamond Corporation, Los Angeles; the Ceco Steel Products Corporation, Los Angeles; and the Columbia Steel Company, San Francisco, Cal.

CONTROL OVER HIGHWAY TRANSPORT by individual provinces of the Union of South Africa is the major obstacle in consummating a recently-proposed plan for establishment of a national ministry of transport in the Union, according to press reports. The object of the ministry would be to nationalize and unify railroad, highway and air transportation of the country. Since control of highway systems constitutes one of the three principal remaining functions of the provincial governments, the latter are averse to surrendering such control. Hence, competent authorities believe that the project must be shelved for some time to come. The administration of the government-owned South African Railways & Harbors is a particularly strong advocate of the establishment of the Ministry of Transport.

THE NEW LOS ANGELES UNION PASSENGER TERMINAL

icap! and visitors emerge from train sheds into huge patios which give the it of California in one big moment. The south patio is a garden designed to y heavy passenger traffic but to afford relaxation to the stroller. Filled with trasts of bright sunshine and deep shadows, tile roof and brick paving, brilliant rers, tall fan leaf palms, sweeping pepper trees, graceful olives and semi- ical plants and vines, this patio extends a happy welcome. The north patio narily for women and children has panels of lawn, fern-like Jacarandas, oranges, eucalypti, avocado hedges, espaliered figs, California live oak and sycamores.

John Parkinson and Donald B. Parkinson, A.I.A., consulting architects.
Tommy Tomson, A.S.L.A., landscape architect.

LHARMONIC ORCHESTRA of Los ieles, under the direction of Otto nperer, continues the series of sym- ny concerts through April at the harmonic Auditorium. The season in- les the customary fortnightly pairs Thursday night-Friday afternoon con- s and a popularly priced series, Fri- matinee and Saturday night. The s and guest artists for the month are: il 6-7, Nathan Milstein, violinist; il 14-15, Olga Steeb, pianist; April 21, Arthur Schnabel, pianist; April 29, no guest artist announced. Tues- , April 11, concert at San Diego, and il 27, Standard broadcast.

' COMMISSION of San Francisco spon- a season of Municipal Concerts at Civic Auditorium: April 25, Grace ore is the soloist with the San Fran- o Symphony Orchestra; and May 2, o Martini, well known Italian tenor, es the season, with the Orchestra.

EMAN CHAMBER MUSIC ASSOCIA- IN presents the concerts on Sunday nings at the Playhouse, Pasadena. ril 16, the Stradivarius Quartet of New k provides the program.

AER WILSON Concert Course is offered the Civic Auditorium, Pasadena, and es the season with Richard Crooks, or, April 13.

LTURAL ARTS ASSOCIATION of the Fernando Valley closes the winter icert season, April 24, presenting her-Menz at the Donna Hubbard Audi- ium, Van Nuys.

E BEHYMER series at the Philharmonic ditorium, Los Angeles, presents Rich- Crooks, tenor, in a song recital, Tues- evening, April 11. Tuesday evening, ril 18, Nino Martini, Italian tenor, pears after an absence of two seasons. votees of the dance welcome the re- n of Humphrey-Weidman and their up of dancers for one performance, ril 21. Jan Kiepura, Polish tenor, is ird, Tuesday evening, April 25; and ice Moore gives a song recital, Friday ening, May 5.

ILHARMONIC ORCHESTRA of Los An- es announces Anne Jamison, young tra and concert singer, as guest soloist the 16th annual Easter Sunday service Forest Lawn Memorial Park, April 9. e Philharmonic Orchestra, with Otto mperer conducting, plays Overture to beron" by Weber, and Overture to eistersinger" by Wagner. The com- unity chorus of 500 voices accompanies e orchestra.

VIC JUNIOR SYMPHONY ORCHESTRA sponsored by the San Francisco Recre on Commission and is conducted by bert Pollak. Under the present plan e Orchestra will give concerts several nes a week at the Western States ilding on Treasure Island during the urse of the Golden Gate International position.

ARTIST COURSE at Claremont Colleges presents Jan Kiepura, Polish tenor, at Bridges Auditorium in April.

OCCIDENTAL COLLEGE announces six Thursday evening concerts by the Pro-Arte String Quartet of Brussels, the first is played this month.

LOMAS RECIPROCAL CONCERTS means a new concert plan to give wider opportunity for appearance to resident artists. An exchange of artists between cities with the proceeds from each concert defraying the expense of the other inter-city event is the basis of operation. The initial exchange is between Los Angeles and San Francisco, and the San Francisco concert is presented April 4, at the Century Club by Alice Mock, coloratura soprano of Oakland. Elaine Lomas originated the plan and conducts a like exchange between Belgium and France.

OPERA READING CLUB of Hollywood presents "Carmen", April 3, under the direction of Leon Rains. Consuelo Menlendez sings the title role.

STRADIVARIUS QUARTET appears at the Lobero Theater, Santa Barbara, April 14. Mrs. Milfred Couper, Santa Barbara, composer and pianist, accompanies the quartet, and has written music for five Community Arts plays at the Lobero Theater. Members of the Quartet are Wolfe Wolfinssohn, Bernard Robbins, Marcel Dick and Iwan D'Archanbeau.

FEDERAL SPRING OPERA FESTIVAL at the Long Beach Municipal Auditorium continues with "Hansel and Gretel", April 12; "The Mikado", April 26; "The Barber of Seville", May 10, and "The Merry Widow", May 24.

A SPRING CONCERT is given by Alice Coleman Batcheider, pianist, and Stephen Deak, 'cellist, April 11, at the Huntington Hotel, Pasadena.

CIVIC LIGHT OPERA FESTIVAL of Los Angeles opens Monday night, May 15, at the Philharmonic Auditorium with Sigmund Romberg's operetta, "The Desert Song", playing six nights and Wednesday and Saturday matinees. Allan Jones is heard in the leading role. The series includes four productions. Edwin Lester is the general director.

CLEMENCE GIFFORD, contralto of Los Angeles, is singing at the Century Club, San Francisco, April 13.

MUSIC CLUB of the California Institute of Technology, Pasadena, presents a second concert series at the Athenaeum, opening with Webster Aitken, April 27, and continuing with concerts by Kurt Appelbaum, May 11, 18, and 25.

HUNGARIAN MUSIC forms the program given by Harlow and Elizabeth Mills at the Vista del Arroyo Hotel, Pasadena, April 16.

Los Angeles Union Passenger Station Is Beautiful Architectural Creation

Glamour of Spain in Southern California Setting Three Days Celebration to Attend the Dedication

Eighteen years ago the California State Railroad Commission issued an order for construction of the Los Angeles Union Passenger Terminal at the so-called Plaza site, primarily as a solution of the grade crossing problem growing out of the location of the main line tracks of the Southern Pacific on Alameda Street, one of the most heavily traveled industrial arteries of the city. After ten years of litigation the commission issued its final order on October 4, 1933, to the three railroad companies, the Southern Pacific, the Santa Fe and the Union Pacific to proceed with the general plan as outlined by it.

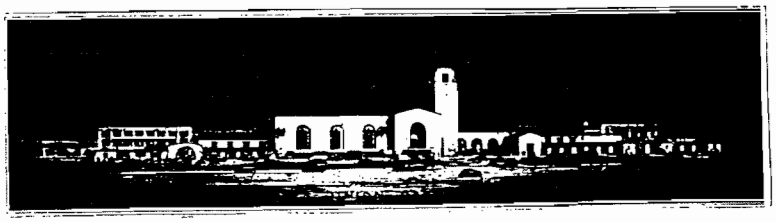
Today the Los Angeles Union Passenger Terminal is a reality and its completion will be celebrated with a three-days' spectacle on May 3, 4 and 5, the theme of which will be "Railroads Build the Nation." The opening event at 11 a. m. May 3, preceding dedicatory ceremonies at the station, will be a great parade running on Alameda Street from Eighth to Ord Street which will feature many locomotives of the 'sixties and 'seventies moving under their own power. "Romance of the Rails", a spectacular production in which 250 actors will participate and numerous locomotives will be used, will be presented each of the three afternoons and nights at the Terminal. The Los Angeles Department of Water and Power and the Metropolitan Water District of Southern California will join in the citizens celebration to emphasize that, having everything to be desired in the way of transportation an abundance of low priced water and power is also available for future development.

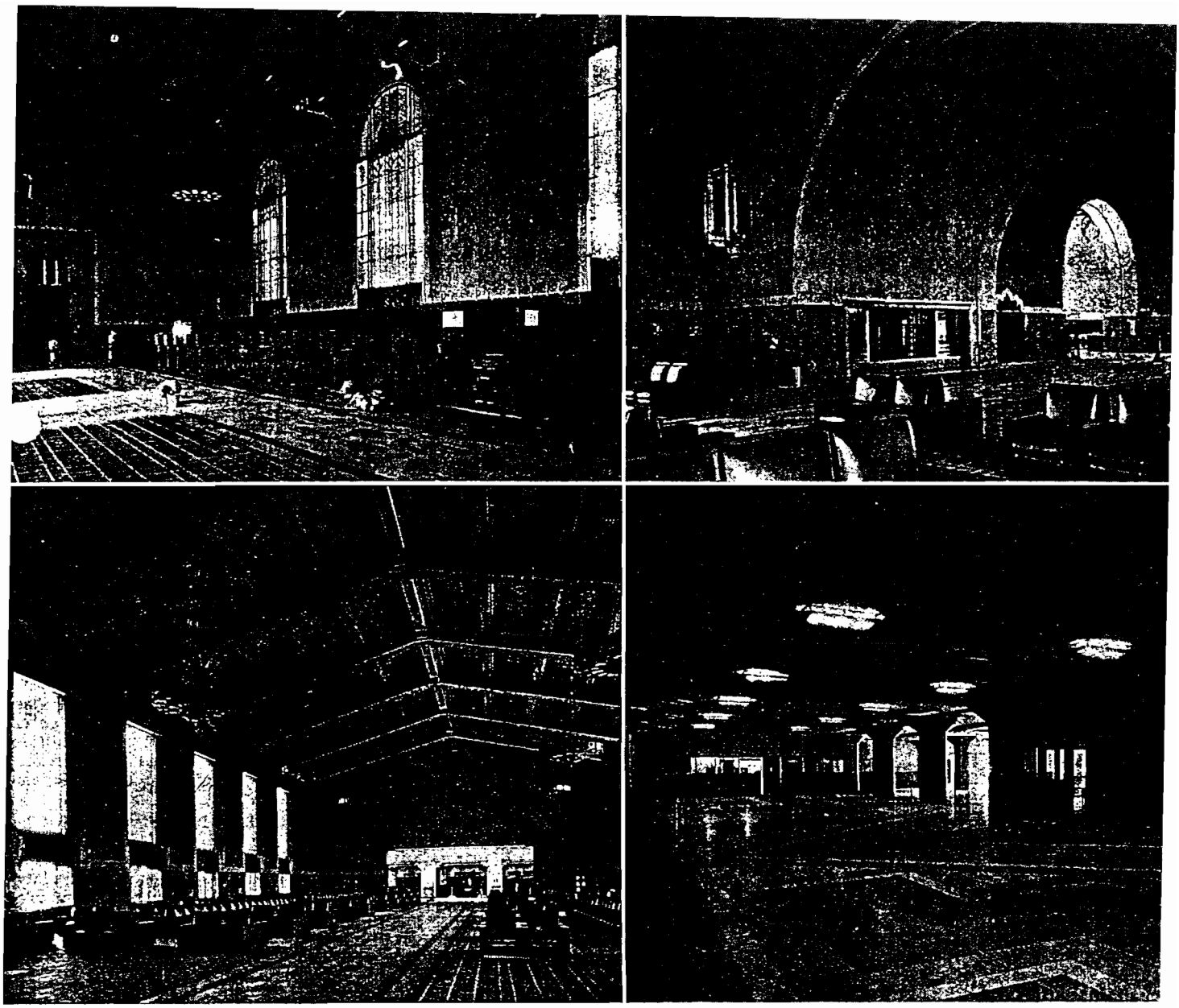
The new Union Passenger Terminal occupying a 44-acre tract on alameda Street between Aliso street on the south and Macy Street on the north surpasses in every way the expectations not only of its early promoters but also of the public which through the years that have elapsed since actual construction was begun has viewed its progress and development only from a distance. There are larger terminals in many of the large cities of the east and mid-west but none more modern or better planned and none so beautiful and glamorous. In fact in all the world it has no counterpart and as an expression of Southern California spirit and architecture it is destined to

spread the fame of Los Angeles and known for its many wonderful s places. To the railroads and the c munity it will be an asset worth n times the estimated 11 million do expended in its creation.

In keeping with Southern Califc traditions the early Spanish influen dominant in the architectural treat of the passenger station and its ap tenant units. The buildings were p ned and designed by an architec committee consisting of the architec the three railroad companies, J. H. C tie of the Southern Pacific, H. L. Gi of the Santa Fe and R. J. Wirth of Union Pacific, with the firm of John kinson and Donald B. Parkinson as sulting architects. The senior memb the consulting firm who participate the preliminary architectural activ did not live to see the consummatic the project, his son, Donald B. Pa: son carrying on for the firm. No sir project was probably ever given thorough and serious study in every tail, the value of which is fully att by the splendid results.

Notable feature of the design of station buildings is the massing and balancing of effects which, with th tended frontage makes a most intere study. Even more intriguing are lines of the low-pitched red tile which, viewed from different points, ticularly in the rear, produce arch tural effects reminiscent of some o notable buildings of old Spain. Pa larly interesting are the converging lines at varying levels where the wa





● **Interior views of new Los Angeles Union Passenger Station.** ● **Upper left, main concourse showing separate ticket booths of the Southe Pacific, Santa Fe and Union Pacific. An ordinary 5-story building could be placed in this room.** ● **Upper right, massive arch separating e trance lobby and waiting room.** ● **Lower left, waiting room with leather upholstered seats, looking toward train concourse.** ● **Lower rig train concourse in first story of mail, baggage and express building off waiting room.**—Photos by W. P. Woodcock, 116 N. Larchmont Blvd., L.

room joins the main concourse in the rear.

Description in detail of a project so extensive and with so many varied parts as the Los Angeles Union Terminal would bewilder the reader just as the place itself will probably bewilder those making their first visit to it. In the layout there are three distinct divisions:

First, the passenger station buildings set back about 222 feet from and fronting on Alameda Street, which stretch out parallel to it about 800 feet.

Second, the mail, baggage and express building immediately back of and parallel to the station buildings. This structure is approximately 1200 feet in length, two stories in height in the middle and three stories at either end.

Third, the tracks and train sheds on a higher level approximately even with the second floor of the mail, baggage and express building, to which a tunnel 28 feet wide and ramps give access from the train concourse. There are 16 tracks for passenger trains with 8 steel umbrella sheds ranging from about 600 to 1200 feet in length.

The passenger station is "L" shaped and consists of three structural units, one paralleling Alameda Street containing the main concourse and the entrance lobby, another extending back from it at a right angle, containing the waiting room, and a third the tower. The main unit is 80 feet wide and 210 feet long, inside dimensions, the second containing the waiting room, 80 feet wide and 140 feet in length, and the tower 30x30 feet and 125 feet in height.

The entrance lobby and the waiting room are on the main axis extending west to east to the train concourse in the mail, baggage and express building. This forms the principal unit in the architectural plan, extending back from the high arched entrance a width of 80 feet and a distance of 220 feet. Separating the entrance lobby in the main concourse and the waiting room is a massive open arch.

On the left continuous with the entrance lobby is the main concourse in which the separate ticket booths of the three railroad companies are located. This room is 62 feet in height from t floor to the top of the walls supporti the roof arches spanning the 80-foot cle floor. An idea of the scale may be o tained when it is stated that an ordina 5-story building could be set inside of and there would be room to spare. T concourse is distinguished by three hi arched windows in the east and w walls.

These three units of the station are steel frame construction with roof trus spanning the clear width of the m entrance lobby and waiting room a the main concourse. The steel frame set between two reinforced concr walls, one on the outside and the ot on the inside, giving the appearance massive masonry, with the deep reve at openings.

At the north end of the main concou is a two-story extension containing public rest rooms on the ground floor the terminal administrative offices on second floor. South of the station connected to it by a high arcade i building containing a spacious restaur

● **Left, rear view of the Los Angeles Union Passenger Station looking over south patio, an interesting study in roof lines. In foreground is cloist extending from restaurant building to mail baggage and express building.** ● **Right, section of train concourse showing glass lighting panel ceiling and architectural details.**—Photo by W. P. Woodcock, 116 North Larchmont Boulevard, Los Angeles.

and kitchen. A covered cloister running back from the restaurant to the mail, baggage and express building completes a large quadrangle, known as the south patio, which is beautifully landscaped and through which incoming passengers may pass on leaving the train concourse. Opposite to it on the north side of the waiting room is a large patio enclosed on the north by a wall extending from the main concourse to the mail, baggage and express building. This, known as the north patio, is also beautifully landscaped. All structures outside of the main units of the station group are reinforced concrete. Exterior walls of all these buildings are coated with cement waterproof paint applied directly to concrete surfaces.

The train concourse at the east end of the waiting room occupies the ground floor of the mail baggage and express building on a level with the main floors of all the station buildings. Entrance of the tunnel to the train sheds is off this concourse.

Interiors of all the station rooms are treated in harmonious color schemes and materials appropriate to the Spanish architectural motive. Floors in the main entrance lobby waiting room and the main concourse are red Padre tile with a central strip of vari-colored marbles in patterns simulating continuous rugs. These marbles include Verde Antique from Vermont, Alicante from Spain, Montana Travertine, Tennessee marble and Campan Melange. The floors in the train concourse are cement tile in pastel shades.

The wainscot in the main concourse and the waiting room consists of a field of Montana Travertine, a golden yellow; with Bois Jordan, a dark marble with spots of blue and red, from France; a band of green and red Campan Melange, and base of Black Belgian marble. Wainscot in the train concourse is a California faience tile. The job consumed approximately 75,000 sq. ft. of marble and tile.

Walls of all the principal station rooms are covered with acoustic board; also the ceiling in the train concourse. The steel roof trusses are furred and plastered to simulate heavy timbers and the ceiling panels between are decorated in conventional designs. Lighting fixtures in the main concourse entrance lobby and waiting room are massive metal chandeliers. Lighting of the train concourse is diffused through glass ceiling panels.

Wood finish in the principal station rooms is black walnut. The ticket booths in the main concourse are also of the same kind of wood. Outside doors and grills are of bronze.

The mail, baggage and express building is adjacent to the 500,000 cubic yard earth fill on which the depot tracks are laid. The ground floor is on a level with Alameda and Aliso Streets and the second floor is on a level with the tracks, 16 to 18 feet higher. The first story of the building is 90 feet in width. Above the second floor it is 40 feet wide, making room for an elevated driveway 50 feet wide along the west side of the building, reached by a ramp from Aliso Street at the south end and by a ramp from Macy Street and the station grounds at the north end of the structure. The three-story section, 162 feet long, at the north end of the building will be occupied by the railway mail offices and the three-story section at the south end, 121 feet long will be occupied by the railway express, while the intervening two-story section will be divided between the baggage and railway express.

This building, containing approximately 200,000 square feet floor area, is of heavy reinforced concrete construction, designed for live loads of 250 lbs. per square foot, utilizing the Mushroom flat slab floor system. All exterior and interior wall surfaces and ceilings are the natural concrete as stripped of the plywood forms which left true and even surfaces. The power plant and mechanical equipment for all the buildings are installed in the first story of this building. At the north end of the station is a garage with a capacity for 134 cars where passengers may store their automobiles when leaving the city by train and pick them up on their return.

The train yard is equipped with all the latest operating and signal devices with electrical control. The tracks enter the yard over Macy Street and dead end at Aliso Street. A tunnel underpass was constructed in Macy Street to allow the tracks to cross over at the proper grad The passenger platforms between th tracks are reinforced concrete, box typ and are protected by all-steel umbrel sheds with Robertson pressed met roofs. The roofs are built with the truss inverted and slope to the inside, the wat being carried off by down pipes enclose with the supporting piers. The spac between the tracks and also all the driv ways and courts within the termin grounds are paved with asphaltic co crete with Type A open surface.

The grounds in front of the station a laid out for automobile parking ar landscaped. The planting here and the north and south patios is on an elab rate scale, including grown trees of var ous species common to Southern Califo nia, such as palms, olive trees, pepp trees, eucalyptus, rubber trees and othe of an ornamental and flowering type. the enclosed north patio there are tw rows of orange trees bearing their golde fruit. In the middle of the north wall this patio there is tile backed fountai The walks are paved with natural fla stones. In the south patio the walks a paved with brick in herringbone patter This patio with its picturesque pylon trees, shrubs and flowers provides charming typical Southern Californ vista to all passengers and visitors con ing and going.

Tracks for the Pacific Electric cars Aliso Street enter the terminal groun between the mail, baggage and expre building and the ramp leading to the el vated driveway. A loop for the Los A geles Railway cars off the B line on Ma Street has been put in at the north er of the station buildings within easy acce of the main concourse.

The Los Angeles Union Passenger Te minal Company was formed by the pa ticipating railroad companies to build a operate the terminal. A committee engineers appointed by the board of go ernors has had charge of the entire pr ject. This committee consists of M. Blanchard, chief engineer, Coast Line Atchison, Topeka & Santa Fe Railwa Co., chairman; W. H. Kirkbride, chi engineer, Southern Pacific, Pacific Sy tem, represented locally by J. C. E. M Clure, and B. H. Prater, chief enginee

Union Pacific System, represented locally by L. T. Jackson.

All of the construction work on the terminal project since its inception has been under the direct supervision of A. J. Barclay, construction engineer representing the terminal company, with S. V. Meigs as assistant.

Construction of the depot tracks and train sheds was done by the participating railroad companies with forces drawn from their own construction organizations. Construction of the mail, baggage and express building and incidental work was done by force account under the supervision of Mr. Barclay. The station buildings were erected under private contract with Robert E. McKee, general contractor. This contract included all the buildings in the railroad station group extending back to the mail, baggage and express building and covered all work in connection therewith except the concrete pile foundations which were driven by the Raymond Concrete Pile Company under a direct contract with the terminal company, the structural steel, approximately 1,000 tons, let to the Consolidated Steel Corporation; plumbing, awarded to F. D. Reed Plumbing Company; electrical work, let to Chandler Electric Company, and air-conditioning, ventilating and structural sheet metal work, awarded to H. S. McClelland.

Lamar Wilson is manager of the Los Angeles office of Robert E. McKee, which executed the contract, and C. C. Wright was the contractor's superintendent on the job.

Mr. Barclay arrived in Los Angeles November 1, 1933, to assume his duties as construction engineer for the terminal company. Clearing of the site, which comprised a large section of old Chinatown was begun December 22 following. The first construction work on the subway connecting the station with the train sheds, was started in March, 1935. The contract for the erection of the station buildings to Robert E. McKee was awarded April 23, 1937.

Credit is given by General Contractor Robert E. McKee to the following for their cooperation in the erection of the station buildings:

California Fire Proof Door Company, fire proof doors.

Havstad Linoleum & Carpet Co., linoleum.

Herzog Iron Works, Inc., ornamental iron.

Eugene Meloeny Company, roofing & waterproofing.

Modern Material Supply Company, roofing material.

National Cornice Works, sheet metal.

F. K. Pullen Company, damp proofing.

Raphael Glass Company, glass and glazing.

Sanymetal Products Company, metal partitions.

Soule Steel Company, steel windows and screens.

Steelform Contracting Company, metal pans and scaffolds.

Trade & Import Company, marble and tile.

Uhrich Millwork, Ltd., millwork.

Harry Wasserman, painting.

B. L. Wilcox Company, skylights.

Patent Scaffolding Company, metal scaffolds.

E. F. Hauserman Company, office partitions.

E. E. Schwenk, plastering.

Ceco Steel Products Company, weatherstripping.

Blue Diamond Corporation, Ltd., Sisalkraft paper.

Valencia Spanish Tile Corporation, cement tile.

A. J. Bayer Company, baggage counter.

Kinnear Manufacturing Company, rolling door.

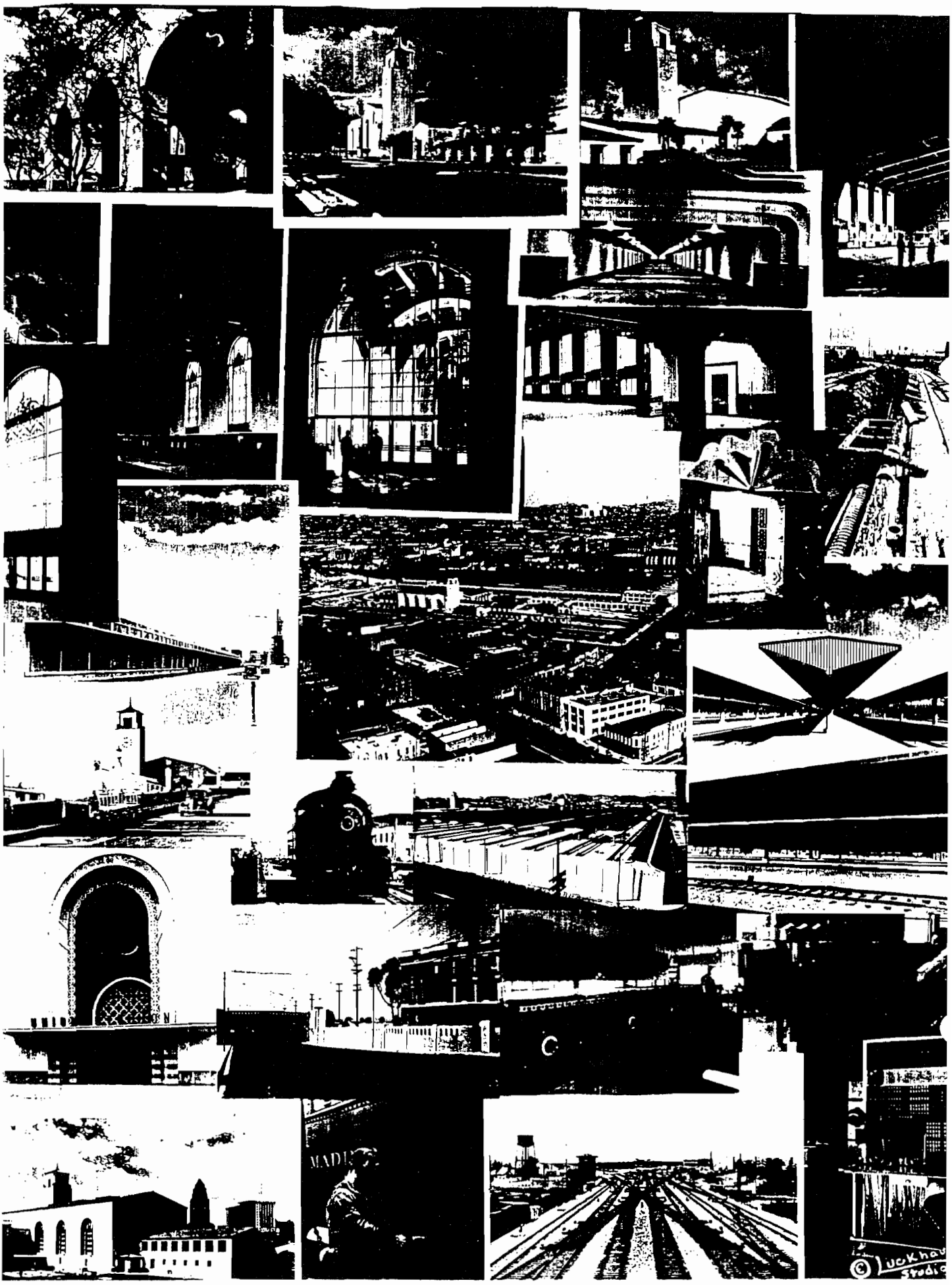
J. S. Watkins, waste moulds.

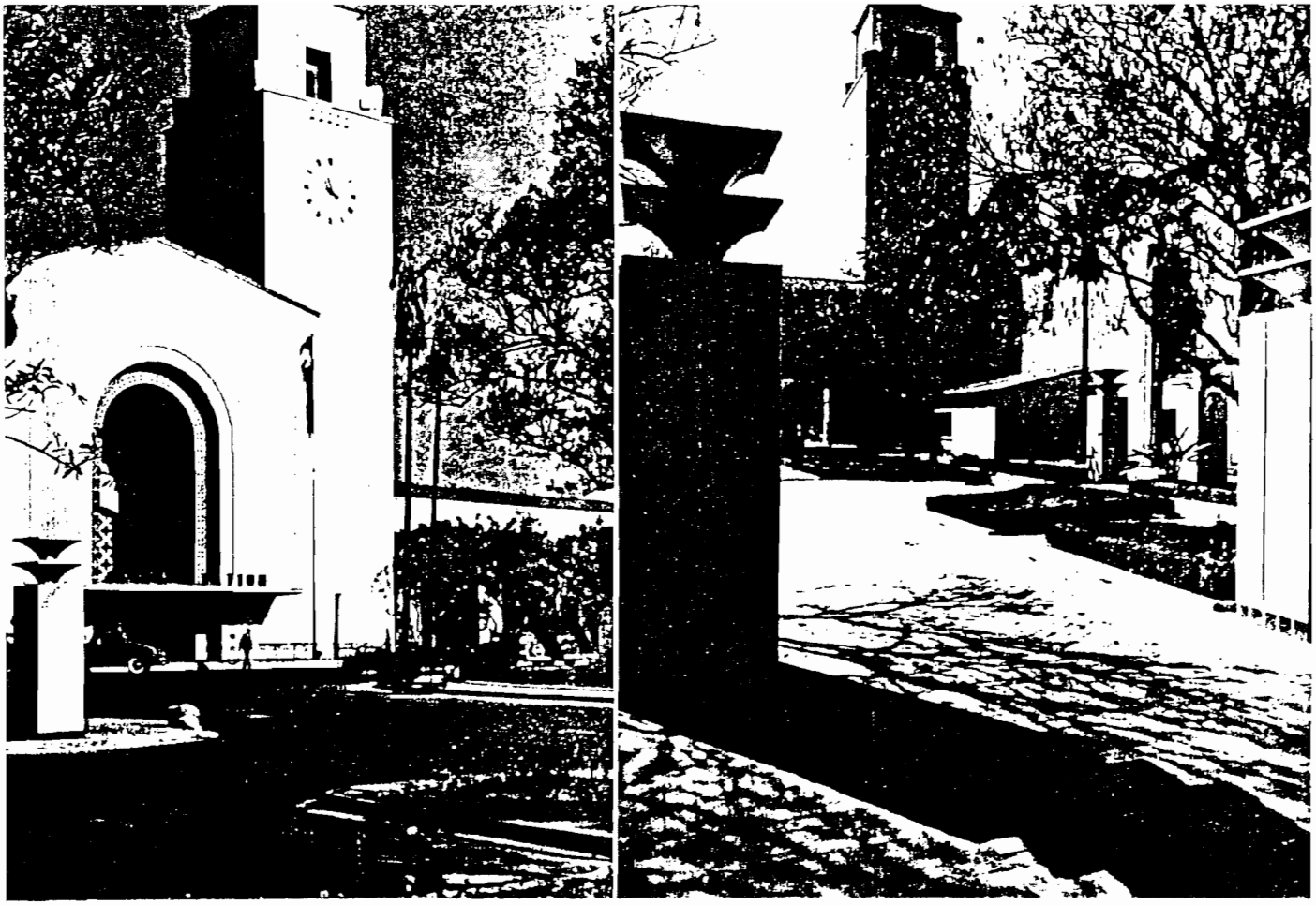
Master Builders, floor hardener.

National Venetian Blind Company, Venetian blinds.

General Fixture Company, railings, etc.

The Trade & Import Company, which had the contract for the marble and tile work is composed of four local contracting firms, Musto-Keenan Company, B. V. Collins, Hilgartner Company, and L. A. Marble & Tile Co., Inc. The faience and ceramic tile used on the job was made by Gladding, McBean & Co.





UNION PASSENGER STATION, LOS ANGELES, CALIFORNIA *Illustrations Courtesy Southwest Builder and Contractor*

Left—Main Entrance and Tower. Right—South Patio Looking West Toward the Tower

LOS ANGELES UNION PASSENGER RAILWAY STATION

LOS ANGELES now may boast of one of the most beautiful Union Passenger Stations in the country. Completion of the $11,000,000 building was marked by a three days celebration which began May 3 and ended on the 5th.

The new terminal occupies a 44-acre tract on Alameda Street between Aliso Street on the south and Macy Street on the north. There may be larger terminals in many of the metropolitan cities of the east and midwest but none more modern or better planned and none so beautiful and glamorous. In fact, as our contemporary, the Southwest Builder and Contractor says, "in all the world it has no counterpart and as an expression of Southern California spirit and architecture it is destined to spread the fame of Los Angeles already known for its many wonderful show places."

In keeping with Southern California traditions the early Spanish influence is dominant in the architectural treatment of the passenger station and its appurtenant units. The buildings were planned and designed by an architectural committee consisting of the architects of the three railroad companies, J. H. Christie of the Southern Pacific, H. L. Gilman of the Santa Fe and R. J. Wirth of the Union Pacific, with the firm of John Parkinson and Donald B. Parkinson as consulting architects. The senior member of the consulting firm who participated in the preliminary architectural activities did not live to see the consummation of the project, his son, Donald B. Parkinson, carrying on for the firm.

One of the features of the design is the massing and the balancing of effects which,

UNION PASSENGER STATION, LOS ANGELES, CALIFORNIA

Left—Arcade connecting station building with restaurant. Center—Station buildings from parking area. Right—Close up of station entrance

with the extended frontage, makes a most interesting study. Even more intriguing are the lines of the low-pitched red tile roofs which, viewed from different points, particularly in the rear, produce architectural effects reminiscent of some of the notable buildings of old Spain. Particularly interesting are the converging roof lines at varying levels where the waiting room joins the main concourse in the rear.

A detailed description of the project would require more space than is here available. Briefly the layout contains three distinct divisions.

First, the passenger station buildings, set back about 222 feet from and fronting on Alameda Street, which stretch out parallel to it some 800 feet.

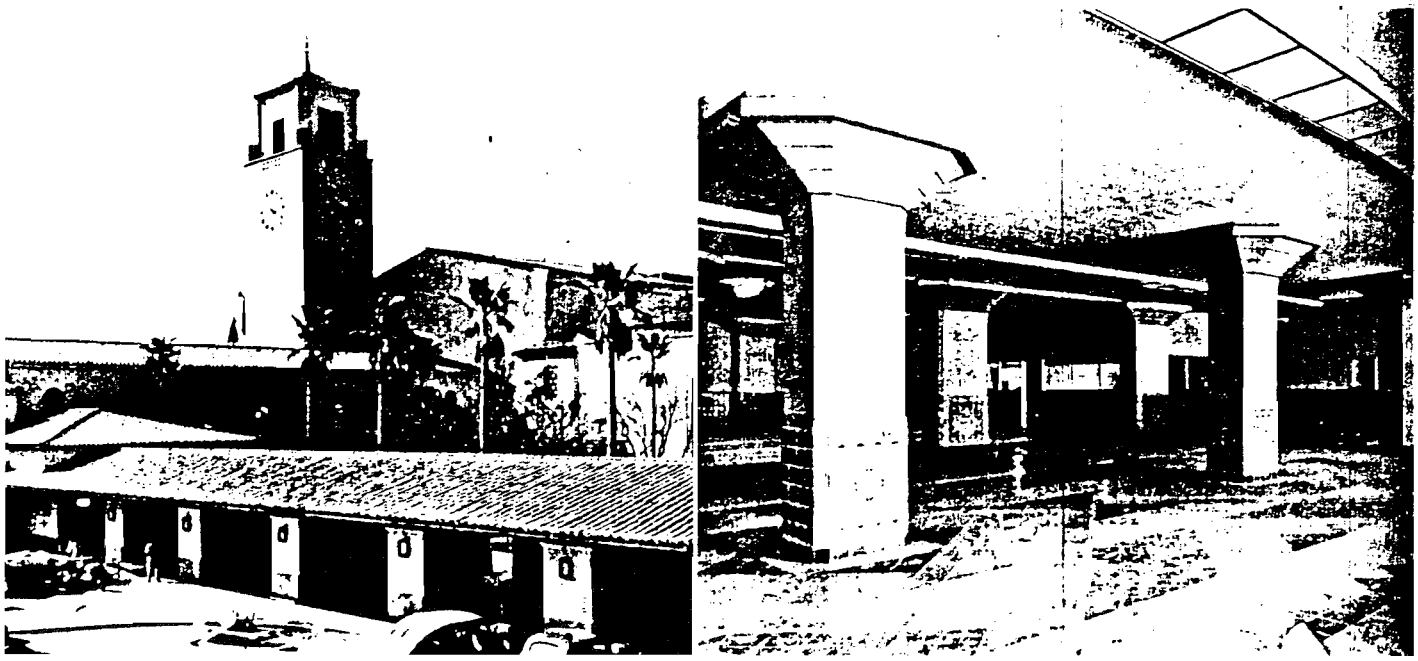
Second, the mail, baggage and express building immediately back of and parallel to the station buildings. This structure is approximately 1200 feet in length, two stories in height in the middle and three stories at either end.

Third, the tracks and train sheds, on a higher level approximately even with the second floor of the mail, baggage and express building to which a tunnel 28 feet wide and ramps give

Photos by Woodcock

UNION PASSENGER STATION, LOS ANGELES

Left—Rear view of station. Right—Section of train concourse



access from the train concourse. There are 16 tracks for passenger trains with 8 steel umbrella sheds, ranging from 600 to 1200 feet in length.

The passenger station is "L" shaped and consists of three structural units, one paralleling Alameda Street containing the main concourse and the entrance lobby, another extending from it at a right angle, containing the waiting room, and a third the tower. The main unit is 80 feet wide and 210 feet long, inside dimensions; the second containing the waiting room, 80 feet wide and 140 feet in length, and the tower 30x30 feet and 125 feet in height.

The entrance lobby and the waiting room are on the main axis extending west to east to the train concourse in the mail, baggage and express building. This forms the principal unit in the architectural plan, extending back from the high arched entrance a width of 80 feet and a distance of 220 feet. Separating the entrance lobby in the main concourse and the waiting room is a massive open arch.

On the left, continuous with the entrance lobby, is the main concourse in which the separate ticket booths of the three railroad companies are located. This room is 62 feet in height from the floor to the top of the walls supporting the roof arches spanning the 80-foot clear floor. An idea of the scale may be obtained when it is stated than an ordinary 5-story building could be set inside of it and there would be room to spare. The concourse is distinguished by three high arched windows in the east and west walls.

These three units of the station are all steel frame construction with roof trusses spanning the clear width of the main entrance lobby and waiting room and the main concourse. The steel frame is set between two reinforced concrete walls, one on the outside and the other on the inside, giving the appearance of massive masonry, with the deep reveals at openings.

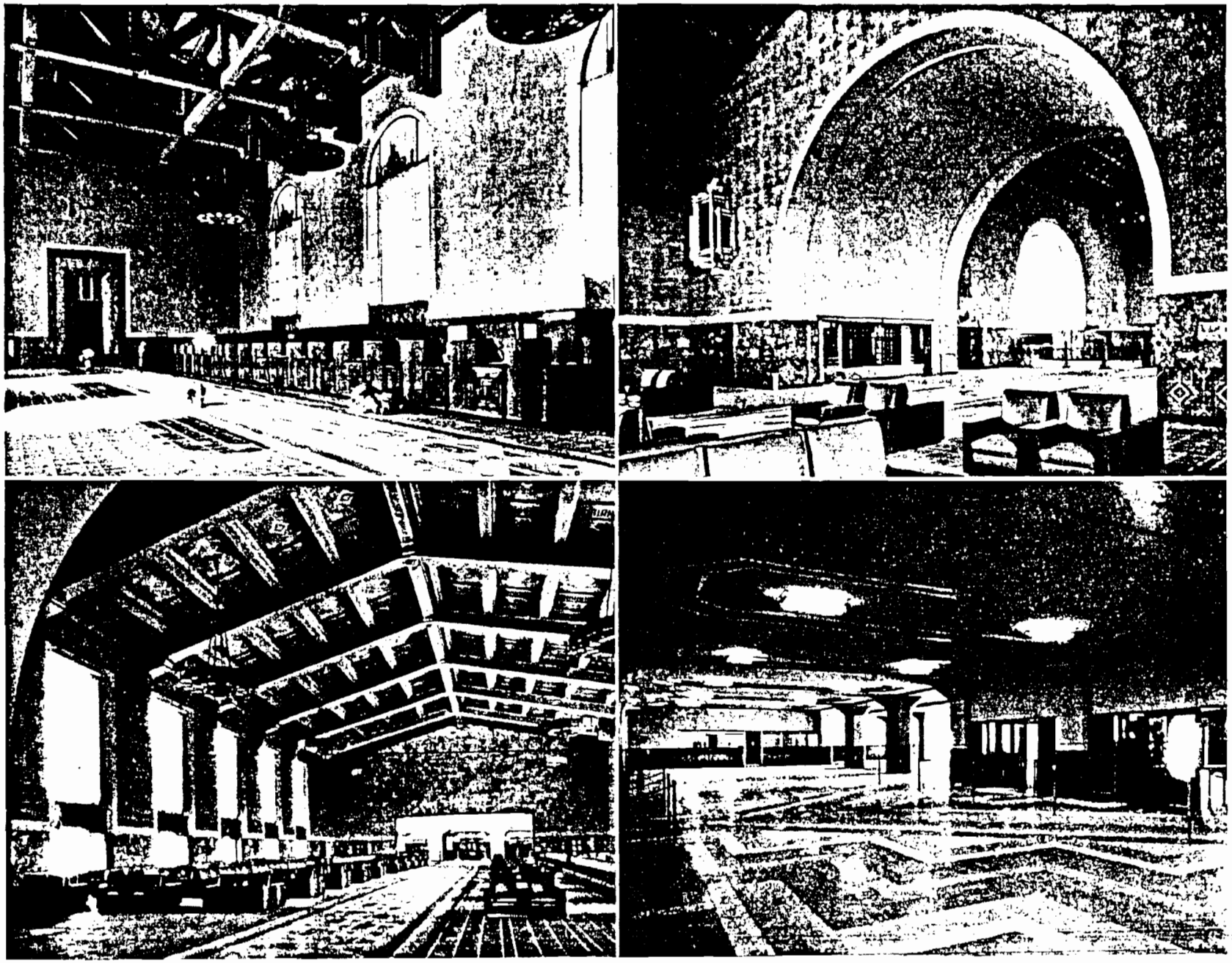
At the north end of the main concourse is a two-story extension containing the public rest rooms on the ground floor and the terminal administrative offices on the second floor. South of the station and connected to it by a high arcade is a building containing a spacious restaurant and kitchen. A covered cloister running back from the restaurant to the mail, baggage and express building completes a large quadrangle, known as the south patio, which is beautifully landscaped and through which incoming passengers may pass on leaving the train concourse. Opposite to it on the north side of the waiting room is a large patio enclosed on the north by a wall extending from the main concourse to the mail, baggage and express building. This, known as the north patio, is also beautifully landscaped. All structures outside of the main units of the station group are reinforced concrete. Exterior walls of all these buildings are coated with cement waterproof paint applied directly to concrete surfaces.

The train concourse at the east end of the waiting room occupies the ground floor of the mail, baggage and express building on a level with the main floors of all the station buildings. Entrance of the tunnel to the train sheds is off this concourse.

Interiors of all the station rooms are treated in harmonious color schemes and materials appropriate to the Spanish architectural motive. Floors in the main entrance lobby waiting room and the main concourse are red Padre tile with a central strip of vari-colored marbles in patterns simulating continuous rugs. These marbles include Verde Antique from Vermont, Alicante from Spain, Montana Travertine, Tennessee marble and Campan Melange. The floors in the train concourse are cement tile in pastel shades.

The wainscot in the main concourse and the waiting room consists of a field of Montana Travertine, a golden yellow; with Bois Jordan, a dark marble with spots of green and red Campan Melange, and base of Black Belgian marble. Wainscot in the train concourse is a California faience tile. Approximately 75,000 square feet of marble and tile were used.

Walls of all the principal station rooms are covered with acoustic board; also the ceiling in the train concourse. The steel roof trusses



UNION PASSENGER STATION, LOS ANGELES

Upper left—Main Concourse. Right—Arch separating entrance lobby and waiting

are furred and plastered to simulate heavy timbers and the ceiling panels between are decorated in conventional designs. Lighting fixtures in the main concourse entrance lobby and waiting room are massive metal chandeliers. Lighting of the train concourse is diffused through glass ceiling panels.

Wood finish in the principal station rooms is black walnut. The ticket booths in the main concourse are also of the same kind of wood. Outside doors and grills are of bronze.

The mail, baggage and express building is adjacent to the 500,000 cubic yard earth fill on which the depot tracks are laid.

This building, containing approximately 200,000 square feet floor area, is of heavy reinforced concrete construction, designed for live loads of 250 lbs. per square foot, utilizing the Mushroom flat slab floor system. All exterior and interior wall surfaces and ceilings are the natural concrete as stripped of the plywood forms which left true and even surfaces. The power plant and mechanical equipment for all the buildings are installed in the first story of this building. At the north end of the station is a garage with a capacity for 134 cars where passengers may store their automobiles when leaving the city by train and pick them up on their return.

The grounds in front of the station are laid out for automobile parking and landscaped. The planting here and in the north and south patios is on an elaborate scale, including grown trees of various species common to Southern California, such as palms, olive trees, pepper trees, eucalyptus, rubber trees and others of an ornamental and flowering type. In the enclosed north patio there are two rows of orange trees bearing their golden fruit. In the middle of the north wall in this patio is a tile backed fountain. The walks are paved with natural flagstones. In the south patio the walks are paved with brick in herringbone pattern. This patio with its picturesque pylons, trees, shrubs and flowers provides a charming typical Southern California vista to all passengers and visitors coming and going.

TEN QUESTIONS AND ANSWERS ON RADIANT HEAT

By C. A. Russell*

1. *Radiant heat travels at the rate of how many feet?*

   Answer: 58,924,800,000 feet per minute (186,000 miles per second—the speed of light).

2. *Does the ordinary house heating system warm the human body?*

   Answer: It does not. When the room temperature is 83 degrees, or less, the human body actually contributes heat to the room.

3. *Which of these solids will attain the highest temperature if all three are placed in a uniformerly heated room—Iron, Wood or Asbestos?*

   Answer: All solid objects in a uniformly heated room have the same temperature whether they be of iron, wood, asbestos or any other material.

4. *Heat can be transferred from one body to another in how many different ways?*

   Answer: Three different ways—radiation, convection, conduction.

5. *If radiant heat is passed through a cake of pure transparent ice, upon leaving it would it contain more, less, or as much heat?*

   Answer: As much heat—and it would not melt the ice.

6. *Can infra-red rays be seen by the human eye?*

   Answer: No, and some of them cannot even be felt.

7. *How is the heat of the sun imparted to the earth's atmosphere?*

   Answer: By conduction. The sun's radiant heat is absorbed by the earth. The earth, in turn, imparts its heat to the atmosphere by conduction.

8. *When their actual temperatures are identical does a metal object feel to the touch colder, warmer, or the same as a wooden object?*

   Answer: Colder. The heat is conducted from the hand more rapidly by a metal object, producing a sensation of chill.

9. *When you are in a room whose temperature is 70 degrees, and you are normally clothed, is the heat transferred outward or inward from the body?*

* General Sales Manager, Wesix Electric Heater Co., San Francisco.

Southwest Builder and Contractor

Participation of Engineers in Early Development of Union Terminal

Review of Conferences Formulating General Plan Grade Crossing Elimination Primary Objective

By **Archer F. Barnard, M.Am.Soc.C.E.**
Consulting Civil Engineer.

There probably is no doubt in any intelligent mind that progress and prosperity anywhere are dependent upon transportation to a greater extent than upon any other single factor. In the United States especially, as in every new country, the railroads have played a most important part in the growth of wealth, the increase in material comfort, and the spread of information and knowledge. This is true of the country as a whole, but even more startlingly true in the development of the Pacific Coast and of the State of California.

In 1920 the impetus to progress given by railroad construction in the southern part of California seemed almost without an equal in the history of the nation. Within a comparatively short space of time Los Angeles had broken all records of growth. From a small sleepy town of but a few thousand inhabitants and few attractive features, and no evidence whatever of advancement, it had increased its population to almost 600,000 in the year 1920, and the railroad was the chief cause of the change. The railroad companies are to be congratulated most heartily on the excellent and beautiful facilities which are now provided in this metropolis, and it is sincerely to be hoped that their heavy investment therein will prove to have been justified. In these days of increasing taxes and decreasing revenues the profitable operation of railroads is not a simple thing, and investments in new terminals and tracks are not an every day or every year occurrence, at least in the western portion of the country.

Dates of Early First Events

Before going into the matter of the part that engineers have played in the early days of the development of this passenger station, it might be of interest to recent arrivals in Los Angeles, and also to some of who have been here twenty or more years, to briefly state some of the dates of important first events in this city of ours.

The Pueblo of Los Angeles was founded under Spanish rule on September 4th, 1781, and the original site of the city was laid out in rectangular shape 200 feet by 275 feet (compare this with the approximate dimensions of the portion of the new passenger station grounds south of Macy Street of about 1200 feet by 1200 feet). At the Pueblo site the Mexican colonists gathered and declared the city to be the Town of Our Lady the Queen of the Angels. Los Angeles is therefore one of the oldest cities on the Pacific Coast and was the first colony to be organized independently and separately from a Spanish Mission. Its population at the time of founding is official ported as forty-four people. Fro date of foundation to that of inco tion in 1851 very little progress c noted.

The beginning of a few of the m conveniences is as follows: The United States census was taken in and the first post office opened on 9th of that year; the first electio held on July 1st of 1850, and the Fargo Express Company arrived in Not until October, 1860, did the firs graph line come into operation be Los Angeles and San Francisco. first locomotive which operated i Angeles came in by water in 1869. railway companies, using horse or cars on the streets, commenced oper in 1872. The first bridges were across the Los Angeles River in 1 Downey Avenue, now North Broa and Aliso Street. The first cable railroad was built in 1874.

The first electric street lights wer in the latter part of 1882, and th phone was introduced in that same Street paving began in 1887 when Spring and Broadway were paved was first produced in Los Ange 1892 from a well dug by hand. Th shipment of oranges was made in The Owens River aqueduct was co ed in 1913. The original San breakwater at Los Angeles Harbo completed very soon after the fin cision in favor of San Pedro, in 18 1909 San Pedro and Wilmington b a part of the City of Los Angeles a tremendous harbor development i district was begun.

To that list of beginnings it is no sible to add, in 1939, the first unio senger station constructed by all railroad systems entering the city. scope of this paper does not permit tioning many other very importa ginnings of modern conveniences district.

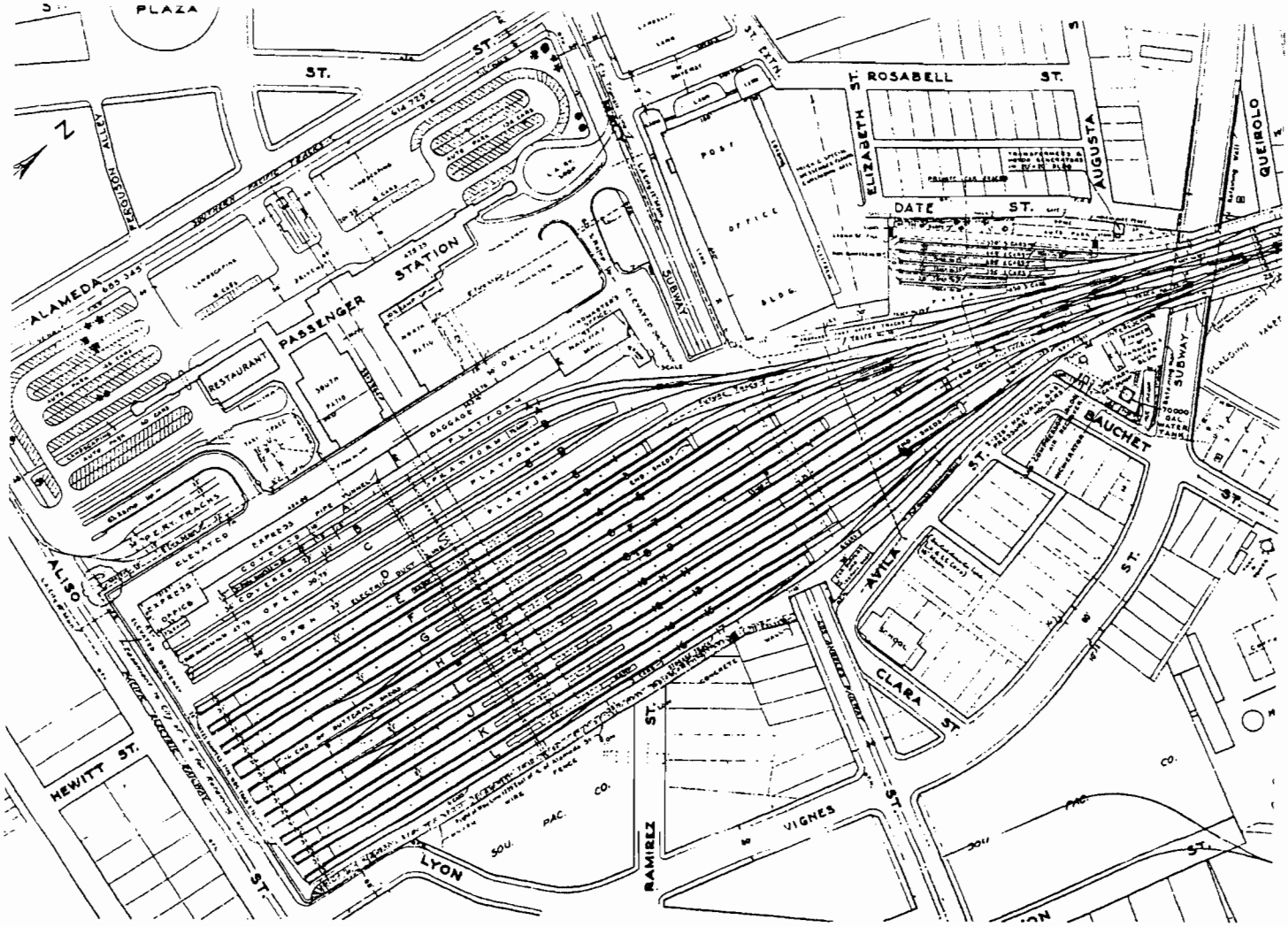
Early Passenger Stations

Since this is "railroad night" a new station is particularly in the light, a brief statement concernir various passenger stations used Angeles through the years should b inent.

The first station in the city wa in 1869 by the Los Angeles and San Railroad Company, now the San Branch of the Southern Pacific pany, and was located on Alameda at what is now Commercial Street

The second depot was built abou by the Southern Pacific Company west side of north Spring Street ab posite Sotello Street. In the fol year a combination building, p which was devoted to hotel pu was built about 100 yards south first one, but was used for only a time. The business of the compa creased rapidly after its arrival Angeles, and it was but a short tim a larger depot was constructed the first had been located, at Street.

By 1876 the Southern Pacific Co had tracks as far south as the mentioned Los Angeles and San Station at Commercial and Al Streets, and it used the latter com



Plat showing general layout of Los Angeles Union Passenger Terminal and connections with main tracks of the Sou ern Pacific, Santa Fe and Union Pacific Railroads at the Los Angeles River.

station for both passenger and freight business. Even after the first Arcade Depot was built in 1884 at Fifth Street and Central Avenue, and as late as 1896, all trains stopped at this depot and also at River Station. The latter was the name given to a brick building on the northeast corner of Sotello and North Spring Street purchased by the Southern Pacific Company in 1885. This station also was used for passengers after the old Arcade Station was placed in operation.

In acquiring the Los Angeles and Independence Railroad Company in 1887 (intended to run from Santa Monica to Inyo County) the Southern Pacific Company obtained a second passenger station within the city. This was located a little east of San Pedro Street about half way between Fourth and Fifth Streets, or about opposite Winston Street. Likewise, through the acquisition of other small local railroads, the Southern Pacific Company had passenger stations at Sixteenth Street and Central Avenue, at Jefferson and Main Streets, and Jefferson Street and Vermont Avenue, the latter known as University Station, and built in 1888. In 1888 the station at Naud Junction was erected where the Alameda Avenue and Alameda Street lines connect, and was used until June, 1912, as a passenger station.

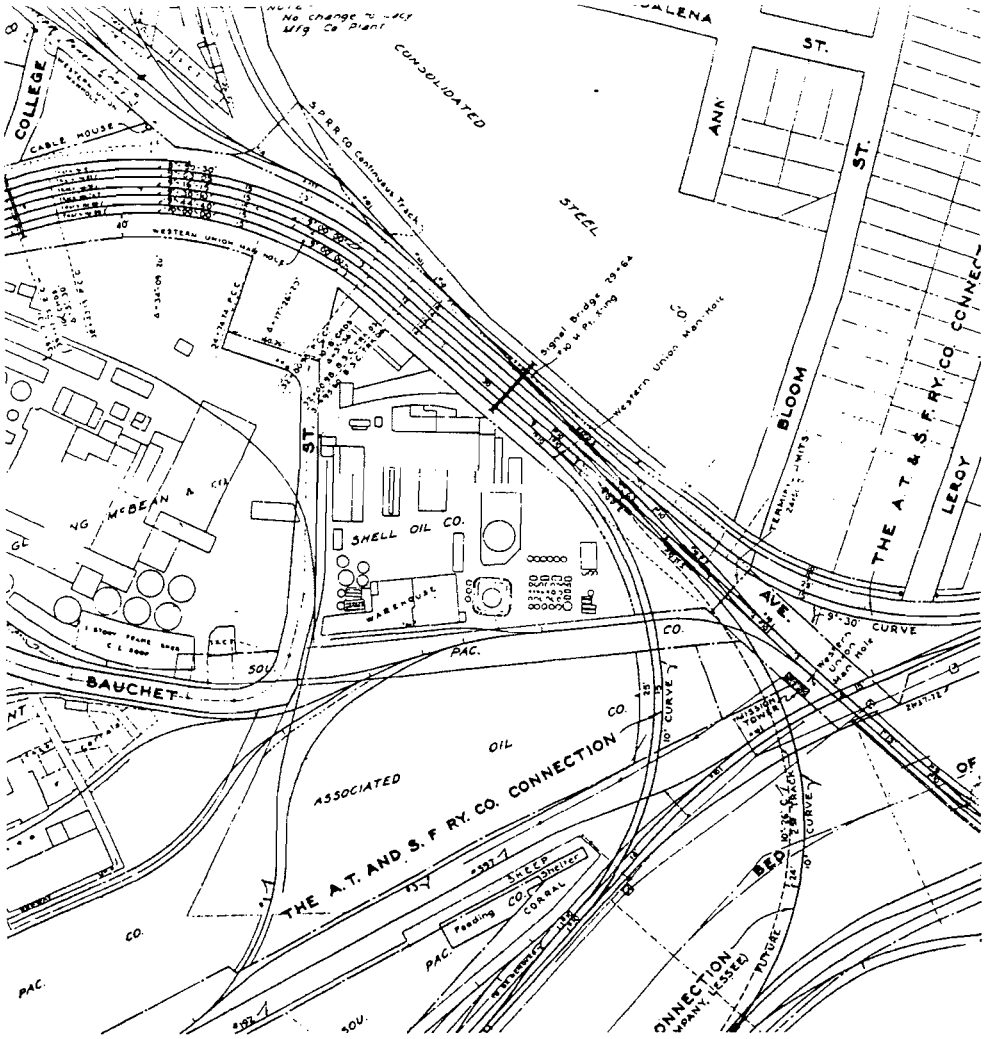
The first station or depot on what is now the Santa Fe System was built about 1884, at Downey Avenue by the old Los Angeles and San Gabriel Valley Railroad Company, just west of the Los Angeles River. In 1887 the Santa Fe built its second station, locating it on the east side of Santa Fe Avenue about half way btween First and Fourth Streets. Not until 1893 was the LeGrande Station constructed on the east side of Santa Fe Avenue just south of First Street. Many alterations and changes have been made since that date, resulting in the present main passenger treminal.

The San Pedro, Los Angeles and Salt Lake Railroad Company, later the Los Angeles and Salt Lake Railroad, and now in the Union Pacific System, had a passenger depot on the east side of the Los Angeles River located at Downey Avenue, which was built by the Los Angeles and Glendale Railroad Company in 1887, and used also by the Los Angeles, Pasadena and Glendale Railroad Company, its successor. In 1891 the Salt Lake Railroad constructed a main passenger terminal at First and Myers Streets on the east side of the Los Angeles River, and after a few years of operating trains into the new station, the old depot at Downey Avenue was abandoned. It is interesting to read that at that time trains to Pasadena were run almost hourly. In 1905 and 1906 the Salt Lake constructed a track along Butte Street, Los Angeles, which connected its main line east of the river with the Southern Pacific Company's track on Alameda Street.

Grade Crossing Elimination

Of the earlier plans presented for a union passenger terminal in Los Angeles, the only ones of which I know are th of Charles Mulford Robinson, submit to the Los Angeles Municipal Art C mission in 1907, and the report of Bion J. Arnold, which was a prelimin report upon the Transportation Prob of Los Angeles rendered to the Council in October, 1911, and wh favored a grand central depot in the cinity of the Plaza. Most of us will n ably remember that Mr. Arnold wa very well-known municipal transpo tion expert of Chicago. The late Ge A. Damon, prominent in local transpo tion and other civic problems, was la ly responsible for the Arnold work.

Following those earlier reports of perts from the east, the Board of P Utilities of the city, under date of 17, 1915, published a report of our m ber and Past-President, Mr. Frankli Howell, then its chief engineer, on g crossing elimination, transportation, gestion, and viaducts across the indus district. The report aroused consi able criticism by the so-called "s viaduct" proponents, with the result the City Council appointed a Viaduct Grade Crossing Committee, which quested the late Homer Hamlin, a m ber of this Society, then City Engi Mr. Howell, and Mr. Samuel Stor consulting engineer of the Municipal gue of Los Angeles, to report to the C cil committee as to the proper meth separation of grades within the Ci Los Angeles. The reply of those engineers, dated May 13, 1916, was



attached as Exhibit A to the complaint of the Municipal League in Case No. 970 before the State Railroad Commission.

The complaint of the Municipal League asked the Commission to eliminate railroad grade crossings, to prevent future use of streets longitudinally by the railroads, and to compel the erection of a union passenger depot and appropriate freight terminals. The various other complaints presented the same issues as the complaint of the Municipal League, except that no relief was asked with reference to a union passenger depot or freight terminal.

Railroad Commission Investigation

On July 3, 1916, all members of the State Railroad Commission came to Los Angeles at the invitation of the City Council for an informal conference with reference to the railroad grade crossing situation and freight and passenger terminal conditions in Los Angeles. On the same day complaints were filed by the Municipal League, the Central Development Association, and the Civic Center Association, and shortly thereafter other complaints were filed by the cities of Pasadena, Alhambra, San Gabriel and South Pasadena. Thereafter, several smaller cities; namely, San Dimas, Pomona, Ontario, El Monte and Sierra Madre, filed complaints with the Commission by letter.

Subsequent to the filing of the above-mentioned proceedings, applications were made to the Commission by the Los Angeles and Salt Lake Railroad, by the Industrial Terminal Railroad Company of Los Angeles, by the Southern Pacific Company, and by the Southern Pacific, the Salt Lake and Pacific Electric companies jointly for permission to undertake certain operating agreements affecting the Los Angeles grade crossing and terminal situation.

Although the defendants in the proceedings, which were the railroads, filed answers denying the jurisdiction of the Railroad Commission, a public hearing on the question of jurisdiction was held in Los Angeles on September 15, 1916, and all of the cases were consolidated. In June, 1917, the State Supreme Court decided that the Railroad Commission had exclusive jurisdiction over the construction and operation of railroads on the streets in Los Angeles, but immediately after the Court's order dismissing a petition for re-hearing, the Commission set Case 970, as consolidated, for hearing in Los Angeles and made arrangements for the necessary engineering investigation. These hearings began Sept. 15, 1916, and lasted until Dec. 12, 1917.

Engineering Investigation by Commission

Active work in the engineering investigation began about January, 1918, shortly after control of the three steam railroads was taken over by the United States Railroad Administration. The report of the Chief Engineer of the Commission was submitted on July 31, 1919, and the Commission's decision, No. 9838, rendered December 6, 1921, ordered a union station to be constructed within that portion of the city of Los Angeles bounded by Commercial Street, North Main Street, Redondo Street, Alhambra Avenue and the Los Angeles River.

As an indication of the broad sc the engineering investigation, th quiry involved the following subje stated in Chief Engineer Richard Sa report: (a) grade crossing elimin (b) union passenger terminal, (c) main line and industrial trackage improvement and possible rearrang of freight facilities, (e) electric in ban, street railway, and automobile fic, (f) city streets, viaducts, and br and the relation of the transpor problem to the general subject o planning.

At the hearings held by the Comm several detailed plans for a station presented. The first was that o Central Development Association was described by our member, Samuel Storrow, one of its engi The station building was to be lo west of and over Alameda Street.

An alternate plan was submitte Mr. Storrow for the Central Develop Association which provided for ver ferent approaches from the three road main lines. The station bu was still to be on the west side of meda Street at the Plaza.

The Central Development Assoc also presented a plan prepared by ou member and Past-President, Mr. Hawgood. Mr. Hawgood's plan l general resemblance to that of Mr. row between the river and Ala Street, but the connections to main of the railroads were quite differen

The Business Stability Assoc presented a plan toward the end hearing through their representativ W. K. Barnard, also a late membe Past-President of this Section. He in his report that the plan was "a bination of some of the ideas which been presented", and was "not sup to be an original plan in a great respects." The Business Stability iation, however, presented an arc tural drawing of a possible station ing at the site. This plan was the one submitted at these hearings gave consideration to rapid transi subways within the congested distr the city in addition to the establis of a passenger station.

The above-mentioned plan of the S ern Pacific and Salt Lake Railroad panies for a joint station was subr to the Commission on Nov. 22, 19 though it had been described and cated at hearings commencing on 24, 1917, a few days after the date agreement between the two comp

The general plan, according t preamble of the above-mentioned ment, was briefly as follows:

The Southern Pacific Company divert its freight and passenger from Alameda Street by making sary track connections with the Salt tracks near Dayton Avenue on the and at the west end of the Butte connection of the Salt Lake Compa Alameda Street, and so utilize th Lake Company's tracks east of the and along Butte Street.

In addition to the very compreh engineering investigation made the direction of Mr. Richard Sachse, Engineer of the Railroad Comm further conferences and hearings

held, and sincere effort was made to establish as clearly as possible all matters of agreement and disagreement that were items of controversy in the said report.

On August 9, 1920, Mr. Sachse rendered to the Commission "A report of Engineering Conference on Los Angeles Grade Crossing and Terminal Investigation," in which he stated that he felt the Commission should know that the Engineering Conference and its sub-committees had done a large amount of work and conscientiously carried out the instructions of the Commission. It is believed that the names of members of that general Engineering Conference should be stated here. They are as follows:

W. M. Jaekle; (D. M. Crosman), representing Southern Pacific Company.

Arthur Maguire, (Charles Adams), representing L. A & Salt Lake R. R. Co.

R. B. Ball, (J. W. Baumgartner), (R. B. Glover), representing A. T. & S. F. Railway Co.

George S. McClure, representing Pacific Electric Railway Co.

Thomas W. Bulpin, representing Los Angeles Railway Co.

H. Z. Osborne, Jr., representing the Board of Public Utilities.

E. P. Dewey, representing City of Pasadena.

R. V. Orbison, representing City of South Pasadena.

Grant M. Lorraine, representing City of Alhambra.

W. K. Barnard, representing Business Stability Association.

Harry Hawgood, representing Central Development Association; L. A. Chamber of Commerce.

Samuel Storrow, representing Civic Center Association; Central Development Association.

W. H. Workman, Jr., representing L. A. City and County; Viaduct Association..

Frank Gillelen, representing Business Men's Cooperative Association.

George A. Damon, representing City Planning Association.

Ralph Bennett, representing Municipal League.

Roy C. Seeley, representing L. A. Realty Board.

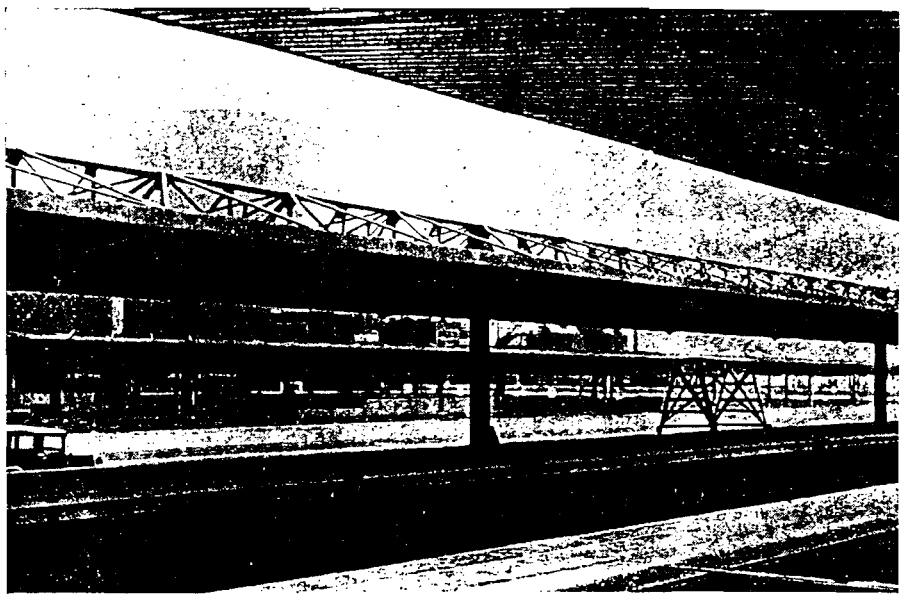
F. P. Gregson, representing Associated Jobbers of Los Angeles; L. A. Chamber of Commerce.

Richard Sachse; H. G. Weeks and A. A. Anderson, representing California Railroad Commission.

Sub-committees were set up to study grade crossings, union passenger terminal, freight terminads, rapid transit and street railways, estimates, and electrification.

In addition to the engineers mentioned in the above list, and elsewhere in this paper, there are doubtless a number of others who took some part throughout the years in the endeavor to solve fairly and wisely the railway grade crossing and passenger terminal problems of Los Angeles, and I regret if I have overlooked any of them.

On Feb. 11, 1920, Mayor Snyder requested the Southern California Association of Members of the American Society of Civil Engineers to consider the report of the State Railroad Commission and submit its opinion thereon, and this was done on or about July 14, 1920.



● **Train platforms and sheds at the Los Angeles Union Passenger Terminal. Sheds are all-construction of unusual design with inverted roof trusses—referred to as the "butterfly t**
—Photo by W. P. Woodcock, 116 North Larchmont Boulevard, Los Angeles.

A special committee was appointed by the Local Section, consisting of Messrs. H. W. Dennis, Ralph J. Reed, and George G. Anderson, all of whom have been Directors of the Society, and the former also a Vice-President, and on April 28, 1920, it rendered a fifteen page report to the Association on the subject.

Proceedings Subsequent to Order

In 1920 there had been Federal legislation affecting Federal control of railroads, and the three railroad systems entering Los Angeles appealed to the California Supreme Court from the Commission's order, asserting that the Commission no longer had authority to take such action.

In December, 1922, the Court decided that the State Commission no longer had sole authority to take such an action of itself, the Federal legislation having set up in the Interstate Commerce Commission general control of the railroads in interstate traffic. The State Commission carried the case to the United States Supreme Court, and in April, 1924, the latter decided that the State Commission could take no such comprehensive action, in view of the carriers being in interstate traffic and in this respect being under Federal Commission control.

These two decisions did not make clear, however, just where authority to order the building of a union passenger terminal did lie, in whole or in part. The City did not wait until a United States Supreme Court decision before proceeding further, and under the direction of Judge Jess E. Stephens, then special counsel in the Union Station matter, and former City Attorney, the matter was laid before the Interstate Commerce Commission immediately after the State Supreme Court had made its ruling. The Interstate Commission thoroughly investigated the matter and in July, 1925, made a finding that the public necessity and convenience required that the Union Passenger Terminal be built. It held that the actual determination of the need for a station here and the actual order for building the station should come from the State Commission, and that the finding and order should be subm to it for a determination whether public convenience and necessity requ it, and whether the railroads financ were able to fulfill the order. The C mission indicated that it would issue certificate when this were done if cc tions remained the same.

In September, 1925, the Los An City Council adopted a resolution ca on the railroads to cease their oppos to the Union Depot, and to coope with Federal, State, County and City ernments to obtain the needed term facilities as a part of a Civic Cente velopment.

On January 5, 1926, the State Rail Commission re-opened its depot hea in accordance with the decision of Interstate Commerce Commission a mentioned, and hearings were adjou in order to test the public sentimer the voters in Los Angeles as to the n sity and location for a Union Sta On April 5, 1926, at a special elec the voters declared in favor of a U Depot in the Plaza area and agains construction of elevated tracks in City.

In August, of the same year, the Railroad Commission reopened its ings and concluded them on the 11 the month, after which the railroad panies and the City filed briefs in Oc and November, and the Commission sequently took the case under consi tion. On July 8, 1927, it rendere decision which re-affirmed its ord sued in 1921; namely, that the Unior tion should be constructed withir Plaza district.

Three separate actions immed followed; in one the railroads again ed the California Supreme Court t view the State Commission's actio the theory that the State Commissio exceeded its authority. In anothe tion the State Commission laid its

Continued on Page 93

Continued From Page 20

ings and order before the Interstate Commerce Commission and asked for the necessary Federal determination and issuance of certificate. In the third action the City laid the whole situation before the Interstate Commerce Commission and again pressed its theory that the Interstate Commerce Commission had full authority of itself to order the station to be built, and that the Federal body's power was not limited to issuance of a certificate.

The Interstate Commission consolidated the State Commission's action toward procuring the certificate, and the City's action, and in May, 1928, reached a decision supporting the State Commission's finding and order of 1927, and issued the certificate that public necessity and convenience required the terminal and that the railroads well could build it. However, the Commission denied that it had authority to issue an order that the railroads do so, holding that this was entirely up to the State Commission.

The City, therefore, in July, 1928, appeared before the Supreme Court of the District of Columbia and asked for an order to compel the Interstate Commerce Commission to assume this authority which the City believed the Commission had. The District Supreme Court in October held against the City, which then carried the case up to the Court of Appeals of the District of Columbia, and that Court in February, 1929, reversed the District's Supreme Court, with the result that the decision then stood in favor of the City's contention that the Interstate Commerce Commission had authority to issue an order that the railroads construct the Union Station.

From that decision the Interstate Commerce Commission appealed to the U. S. Supreme Court, and in November, 1929, the decision was handed down that the interstate Commerce Commission had no authority to order the terminal built, but remained silent as to what power the California State Railroad Commission had in such a matter.

In 1930 the State Railroad Commission and the City of Los Angeles asked the U. S. Supreme Court to uphold the order of the State Commission, and on May 18, 1931, the Supreme Court ruled in favor of the Commission and the City. That decision became final.

In 1932 an injunction was sought by the carriers against the order of the Commission to build, but the State Supreme Court denied the injunction. A suggested plan which would have located the Station north of the Plaza, but outside of the limits prescribed by the order of the Railroad Commission, was unsuccessfully submitted for the approval of the Commission.

In 1933 another attempt was made by the carriers to prevail upon the Interstate Commerce Commission to again re-open the whole subject, but the Commission refused.

In 1933 the presidents of the three systems, after years of valiant defense of what they considered their rights, but confronted with a long line of legal decisions against them, announced the end of opposition, with the statement that they would begin building the Terminal. Within a year, that is, in 1934, the first work on the project was begun, but progress was delayed for a considerable period by controversy over the location of a new working Post Office, which the United States was required to erect. Eventually a site at the northeast corner of Macy and Alameda Streets was chosen for the Post Office Building.

Since this paper is not intended to cover the period of construction of the Union Passenger Station, suffice it to say that since 1934 some work has been under way on this mounmental structure and the appurtenant trackage and other facilities, which doubtless is the latest terminal of its kind in the United States and thoroughly modern.

In connection with the long years of litigation, I recall that one of the roads' representatives stated that would fight the order to build a Plaza site if it took twenty years though it is not quite twenty years the date of the order, it is twenty lacking only three or four months, the date of the report of its Chief neer to the Railroad Commission though the particular objector ha quite made good on the full twenty I think that we must admit that h his associates have made good in a way, a big way, by finally giving M politan Los Angeles a magnificent, ern, and much-needed passenger s for the use of the hundreds of thou of travelers to and from the City Angeles each year.

Interesting Features of Structural Design of Union Terminal Buildings

Unit Construction for Earthquake Protection Structural Steel Between Concrete Walls

THE STRUCTURAL DESIGN AND CONSTRUCTION OF THE UNION PASSENGER TERMINAL

By Clinton L. A. Bockemohle, Assoc. M. Am. Soc. C. E.
Structural Engineer for the Union Passenger Terminal

The purpose of this paper is to give an outline of the variety of problems in the structural design and construction of the Los Angeles Union Passenger Terminal.

The first unit to be designed and constructed was the passenger subway. Several schemes were considered, the one constructed being a single span bent of reinforced concrete, 28 ft. in the clear. The walls are 19 feet high in the clear, the bottoms being semicircular at contact with the footings. This section is continuous in lengths of 44 feet to 66 feet to equal a total of 570 feet. With top of rail only 21 in. above top of concrete, the design for Cooper's E-70 loading required a 33-in. slab.

Eight ramps on each side connect the passenger subway to platforms between tracks. The closed section of a ramp supports a typical column of the train sheds or passenger platform shelters. The columns are 80 feet apart, this being the average length of passenger cars. At this spacing the horizontal force, due to wind load, is computed at 11,000 lbs. at 19 feet above top of closed section of ramp. The open section of a ramp supports a double column. With the same horizontal force, the double column required increased width of base slab because the open section of the ramp was too light for stability.

The type of train sheds is unique, the roof being suspended, with all of the structural steel trusses exposed above. The main longitudinal truss is continuous for uniform 80-foot spans. At right angles are equal and opposite cantilever trusses to provide a total roof width of 24 feet over a platform 21 feet wide. The total length of all passenger platform shelters is 9,520 feet.

To resist lateral force, the typical train shed column is designed as a cantilever crosswise, and as fixed top and b lengthwise of the platform. A t column footing is cross-shaped of forced concrete arms, with total len 19 feet crosswise and 15 feet lengt The excellent alignment of these runs of sheds is a testimonial for the ful field work of the Terminal for constructing the foundations and s the anchor bolts; and for the stru steel contractor for fabrication and tion.

The next order of design was one units of the mail-baggage-express ing. Roughly, this building is 120 long by 90 feet wide on the ground or street level. It is parallel wit 475 feet distant easterly from Al Street. The entire eastern edge long structure retains the earth f the tracks, which are 13 feet to 1 above street level. The first pr was to divide this length into units would satisfy requirements of ter ture, occupancy and seismic resista

The 90-foot width at track level vided into a 50-foot roadway alo west side, and 40-foot building floor the east side, to which is added an platform adjacent to the tracks. the platform is a pipe tunnel 7 fee by 16 feet wide.

At the north and south ends the way turns to the east to connec track area. Above track level north end is a two-story reinforce crete building 60 feet by 160 feet fo graph and telephone headquarters. ilarly at the south end is a tw building 65 feet by 120 feet for off Railway Express Agency.

Between these two units is an 8(long roof structure of structural covering the building floor and pl area. The roof truss is a 40 foo

plus an 18 foot cantilever. To resist lateral forces, the steel columns were designed as fixed at the top and hinged at the bottom. Double columns and trusses are used at the separation joints between the four units of the 800 ft. length, which was divided at 200, 220, 160 and 220 ft. lengths. Three more units of 100, 160 and 160 ft. complete the 1200 ft. length.

At track level any unit has a flat slab roadway of two 25 ft. panels and a warehouse floor 3 ft. higher to be level with floors of mail-baggage-express cars. The Los Angeles code requirement for 8% lateral force was applied entirely to walls on four sides of any unit. In addition, 2% lateral force was applied to each line of columns to meet the code for that percentage applied to a frame. In general, bottom of foundations for mail-baggage-express building are 10 ft. to 14 ft. below street level on a stratum of gravel which is 23 ft. or more below track level. The east wall of the pipe tunnel supports the east edge of the platform and rests on a spread footing on the earth fill. Therefore a hinged joint is provided in the floor at platform level where it joins the floor supported on gravel foundations.

The boiler room portion of the mail-baggage-express unit required designs of retaining walls to fit construction procedure. The room is 100 ft. long from north to south. On the east side is a railroad track supported on 13 ft. of earth fill, retained by a cantilever wall poured against the earth fill. Sixteen feet west is another retaining wall with the thrust of the first wall at its top and an additional 15 ft. of earth pressure. Later this wall was continued upward 17 ft. with columns to support the warehouse floor, and the columns then had to resist bending as end supports of 40 ft. girder spans.

On the west side of the boiler room is a pipe tunnel 8 ft. high, with floor at boiler room floor level. Above the top of this tunnel is a retaining wall 7 ft. high and this combination retained 15 ft. of earth pressure for a considerable time interval before columns were continued upward to support the drive-way flat slab of two 25 ft. spans.

The north and south ramps, which give access to the drive-way for truck traffic from Macy and Aliso Streets, are curved structures with ample walls to furnish code seismic resistance. To reduce damage from earth movements, the connecting links between ramps and elevated driveway were designed to slide on ramp supports while anchored to driveway supports.

The building units west of the mail-baggage-express building have the job term of "passenger station". This is one continuous floor area at street level, and the structural separations will not be evident to the casual observer. In general, separations are made at all changes in mass. This simplifies seismic analysis, and will result in much less earthquake damage than would obtain if the units were all tied together.

The tower is an entirely separate unit resting on a concrete mat 35 ft. square supported by 76 piles. The tower is 29 ft. square and 125 ft. high from street floor to peak of roof slab. The four walls of the tower for a distance of 20 ft. above street floor have much variation in size and location of openings. In this height up to the first diaphragm parallel walls were designed to be equally rigid to eliminate rotation due to earth movement.

In the main concourse and in the waiting room, the architectural requirements called for external walls 42 inches thick. This was met with exterior and interior faces of 8 in. thick concrete walls having 26 in. air space between. The space is utilized as return circulation air ducts for the forced air heating system. At spacings for 80 ft. span structural steel roof trusses, the entire wall thickness becomes reinforced concrete columns, using a combination of structural steel and reinforcing bars as reinforcement.

The structural steel latticed columns were designed to take roof truss gravity loads, and to serve as lateral supports for wall forms. Enough reinforcing bars were added to result in reinforced concrete columns capable of taking stresses which are greater than those caused by gravity loads. The columns in the main concourse are 55 ft. high above the floor.

Diagonal bracing of structural steel in the plane of the hollow walls was done with flat bars, located to be flush with inner surfaces of the double concrete walls, thereby avoiding interference with removal of inner forms for concrete. The flats were designed to take the 2% of lateral force requirement of the code, but the entire 8% was applied to the concrete walls.

Between the tower and the restaurant is an arcade built entirely of reinforced concrete, and is entirely hollow except for floor and roof slabs. The central piers have external dimensions of 5 ft. by 8 ft. and internal space of 3½ ft. by 5½ ft. The end piers are correspondingly larger. The arches connecting the piers are of hollow concrete sections connecting the piers are of hollow concrete sections. The entire portion above the spring line of the arches was one continuous pour, requiring ingenuity and much care in the building of the forms and the placing of the concrete by the general contractor.

The arches and piers of the arcade were made hollow to reduce the enormous weight which would have been involved in a seismic-resistant design. When the space was available, three piers were used as air intakes for the restaurant air conditioning system, and five others for air supply and exhaust for transformer vault, switch room, and garage ventilation.

The Terminal project required a variety of retaining walls. The Aliso Street wall is a counterfort type on drilled concrete piles with conical frustrum base. The Avila Street wall is a cantilever type on driven tapered concrete piles. The short length of wall between Macy Street subway and working post-office is interesting, because the stem of the wall is several feet longer than the base slab; the counterforts are on a skew and have large holes to permit passage of a large gas main.

The foundation for the 70,000-gal. water storage tank was an interesting problem. The location is on the sloping edge of earth fill, and gravel is 17 ft. below bottom of steel tower legs. No value was given to the earth fill in lateral resi ance, the entire lateral force being plied to four concrete columns connec at their tops by a system of concr beams, which also support the grav load of the 4 ft. diameter standpipe.

Accessory buildings and equipm added to the variety of problems. T signal towers have basements, two sto of bearing walls topped by a third st of glass walls on steel frames. Late resistance was built into the steel fra supporting three brick-set steam boil in boiler room. When two former r road tank cars were buried under 17 of earth for fuel oil storage, there presented a problem of external p sure applied to thin cylindrical vess

I have tried to avoid a discussion ordinary gravity loads applied in usual way to building design. I have covered such subjects as design of c crete mixes for 63,000 cu. yds. of c crete, the application of commer building board to produce a texture concrete surface, the installation of mile of steel ladders in hollow spaces, the making of shop bending tails for 2,300 tons of reinforcing stee

Technical Work

In the engineering work, that is, lay of tracks, calculating grades, amoun ballast and other work involved in br ing the tracks in, required 626 sheet drawings and some 400 sheets of com tations. This includes working draw and studies. The specifications requ approximately 100 sheets of typewri work.

In the architectural bureau the required 174 sheets of working drawi 753 sheets of architectural sketches studies ,and 375 sheets of large scale full size details. The architectural sp fications covering the building and inet work generally consisted of pages of typewritten data.

The structural engineering requ 2248 letter size sheets of computat covering seismic and gravity stresse the buildings and retaining walls. drawings portraying the structural required 770 sheets of working draw 8 sheets of special detail and 79 shee sketches.

The above-mentioned drawings di include the hundreds of sheets of drawings for structural steel, ornam metal, bronze, marble, tile, cabinet etc., which were prepared by the tractors or sub-contractors doing work, but which were checked by architectural and structural forces o Terminal.

To properly delineate the elect wiring and work, required 429 shee drawings, together with 300 pages o scriptive specifications.

The plumbing, heating, and ventil work required 806 sheets of drawing 800 sheets of specifications. In this tion were also included the elevator ifications, acoustical analysis and s fication, and pneumatic tube system sprinkling system.

A resume combining all the shows the following figures:

Specifications	1500 pages
Drawings	4020 sheets
Computations	2648 letter-size she

Engineer Describes Mechanical and Electrical Facilities of Terminal

Air Conditioning Provided for Main Buildings Fifty Miles of Conduit for Electric Wiring

MECHANICAL AND ELECTRICAL FEATURES
UNION PASSENGER TERMINAL

By Paul Lebenbaum
Southern Pacific Railroad Company, Chairman Electrical and Mechanical Committee

On the mechanical end, provision had to be made for steam, air, water, gas, heating and ventilating facilities; and on the electrical end, for lighting and power for both the terminal yard and the station structure itself; for telephones, public address system, clocks and other minor electrical requirements.

On the mechanical end, the problem which first presented itself to the Committee was to determine the location of the boiler plant; whether it was to be a plant located at ground level in some portion of the area not occupied by the passenger station or the terminal yard, or whether it was to be a so-called basement plant. As you will have noted from your inspection this afternoon, the boiler plant was finally located in the basement of the baggage and express unit, in an area which required some excavation but was worked into the general plan in an economical and very practical manner, considering its relation to the facilities it had to serve.

The size of the boilers were determined from a study of the heating requirements for the terminal buildings, plus the requirements in the winter for heating the large number of passenger cars which might be parked in the terminal yard. The end result was the installation of three 300 h.p., 250 pound boilers, each equipped with a Thermix stack and with all the necessary auxiliaries, including feed water softener, feed water regulators, boiler feed pumps, etc.

For the terminal yard, steam headers are taken from the boiler room along a natural pipe tunnel underneath the baggage platform, and thence into a pipe tunnel underneath the yard tracks, and parallel to the subway. In this pipe tunnel are also placed the compressed air and water service lines. Between each pair of tracks a chimney extends down from the platform level to the pipe tunnel and up through this chimney are taken the taps for the services which I have just mentioned.

Heating for the main buildings is accomplished by a forced circulating system in which filtered air is passed over steam coils by means of blowers, and carried through ducts which are located in the space between the roof and a false ceiling in the main concourse and in the main waiting room. These ducts have openings through which the heated air is forced downwards. The air is withdrawn through grilles at the floor level and re-circulated. In the main concourse, these grilles are located in the lower part of the ticket counter, the floor of which—elevated somewhat above the general floor of the main concourse—forms an enlarged fan-like inlet for most of the air circulated in that part of the building. Provision is made to add up to 50% of fresh air to the re-circulated air.

For cooling in summer, the warm air can be blown over the same coils in which cold water replaces steam.

The restaurant is provided with a separate air conditioning system in which, besides heating or cooling, the air is conditioned by means of a standard evaporative condenser system using Freon as a cooling medium, and having a capacity of 75 tons in two units.

Steam is provided for heating water in the various lavatories throughout the building.

Chilled water for drinking purposes is pumped through a circulating system.

For the fuel, surplus natural gas will be the normal supply. Provision has been made for burning fuel oil, the supply for which is in an underground reservoir below the level of the boiler room floor.

Steam, air and water are, of course, also brought to the private car tracks.

There are five hydro-electric and two electric elevators in the baggage and express unit, as well as a reversible conveyor for handling small pieces of baggage from the ground floor to the track level of the baggage and express unit.

Turning now to the electrical facilities: The problem here was to furnish service for light and power over a very large area; this precluded the selection of one central point at which all of the transformer capacity could be concentrated. Many plans were studied. The one finally selected involved the establishment of transformer substations at points in the area which could be used as economical distribution centers for the lower voltage circuits.

Power is brought into Vault No. 1 over two cables at 4800 volts, from two separate substations of the Bureau of Power and Light of the City of Los Angeles. One cable serves as a preferred source; the other, an emergency source; with automatic transfer switch between. At Vault No. 1, the 4800-volt bus is divided into two parts, one side being the lighting bus, and the other power bus. The schedules of the City make mandatory the segregation of power and lighting loads.

From Vault No. 1, 4800-volt energy is distributed over separate power and lighting cables to Vault No. 2, in the center of the track yard; Vault No. 3, which is on the street level at the north end of the baggage building; Vault No. 4, which is in the basement under the main arcade; Vault No. 5, which is in the manhole at the terminal interlocker; and Vault No. 6, which serves the p car tracks.

Vault No. 2 is the service vau all of the lighting and power re ments of the terminal track area. are located 1500 kilowatts in transformers, which step down the age to 240-volt, 3-phase, to be use driving the auxiliary motors on ele mechanical air conditioned equi on the cars. In this vault there i a 100 kw transformer for lightin umbrella sheds, the total length of are about 9500 feet. The shed equipped with 476—150-watt li units spaced 20 feet apart. The um sheds support approximately 40 t conduit for the various battery cha air conditioning, and lighting circ

Under each platform and leadir from the south ramps, there are rooms approximately 8 feet squa which are housed all of the switche trolling the circuits associated wi conditioning, lighting, communic etc., along that particular platform

All of the circuits (with some exceptions), for lighting of the mai course and vestibule, the waiting restaurant, clock tower, garage, et controlled from Vault No. 4. T large fixtures in the main concours waiting room represent a total lo 75 kilowatts.

Vault No. 3 is the distribution for the north end of the baggage ar press unit; Vault No. 5, for the Ter interlocking tower, and in Vault provision is made for taking care conditioning and battery charging vate cars, and for lighting the ad area.

In laying out these circuits, 65,0 of Transite conduit and 200,000 f steel conduit were used. To place without interfering with structura architectural requirements implied cooperation with the committee that part of the work in hand, an of the reasons this cooperation w complished successfully was tha Electrical-Mechanical Committee w ganized in the early stages of the ning period, and was thus able t its facilities, which included stea and water lines, and heating and lating ducts, suitably incorporated general plans. Furthermore, pr has been made for expansion of e and installation of additional facili nominal expense, by construction sageways and tunnels under the Te buildings, and installation of spare etc., where required.

In the last analysis, the electric mechanical facilities of a project s this, bear to it the same relation t Service of Supply does to an Without them, it is useless; with it becomes possible to dedicate th minal to the service of the Public

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May meeting of Southern Cal Chapter, The American Institute chitects, will be held at Los A Union Passenger Terminal, dinne served in the Fred Harvey restau the depot. The program will in tour of the terminal conducted by Parkinson, consulting architect buildings.

Quantities of Materials in Terminal Are Cited by Construction Engineer

CONSTRUCTION OF AND QUANTITIES INVOLVED LOS ANGELES UNION PASSENGER TERMINAL

By Alexander J. Barclay M. Am. Soc. C. E.
Construction Engineer

I wish to state that the personnel of the Terminal has been wonderful. Gathered together from three railroads, practically strangers to one another, we welded together a wonderful organization. In the six years we have worked together, Mr. Meigs and myself have not had a single cross word or bitter argument.

This hearty support of all has resulted in a structure that is as near perfect in construction as a structure this size can be.

Starting with the foundation, which was river sand, gravel and silt with some mud pockets, our first thought was borings and then soil tests; these we took at strategic points and arrived at a maximum bearing load of 12,000 lbs. per square foot. This data was turned over to the structural engineers.

The fill was then started under the direction of Mr. George Rowe, General Inspector. All material for the bank was carefully selected and placed in six to eight-inch layers, depending on the character of the material, was carefully moistened and tamped with a sheep's foot roller and a tandem or a three-wheel roller, as the material warranted. A test at completion showed a bearing load of 17,000 lbs. per square foot. Alternate tests with the level show no settlement.

The following statistics may be of interest to you, all figures being a close approximation:

The area of the Terminal is 44 acres.

500,00 cu. yds. of material were used in the fill.

The main structure, including the mail-baggage and express unit, has a total floor area of 338,304 square feet.

For water, steam and air there were used:

99,000 feet of iron and steel pipe
15,000 feet of copper pipe
25,000 feet of soil and vitrified tile
8,000 feet of porous drain tile
27,000 feet of corrugated perforated pipe
2,500 feet of reinforced concrete pipe

a total of 176,500 feet or approxi-mately 33.5 miles of pipe, all sizes.

There were 1,168.6 tons of structural steel and 3400 tons of reinforcing steel used.

65,100 cubic yards of concrete and 101,000 barrels of cement were used.

There are 12.72 miles of track with 96 switches, 26 of which are slip.

10,000 lineal feet of train sheds.

To place this material where it belonged required, exclusive of shop drawings prepared by vendors,—

1500 pages of specifications
4020 sheets of drawings
2700 letter-size sheets of computations

all of which and much more went to complete the magnificent structure you viewed today.

No project was ever done by one individual and to my assistant, Mr. S. V. Meigs; our general inspector, Mr. George Rowe; our assistant engineer, Mr. George Bidwell; our general foreman, Mr. E. M. Peck and his assistant, Mr. Kesler L. James; our mechanical engineers, Mr. W. A. S. Harmon and his successor, Mr. K. O. Schwabe; our electrical engineer, Mr. Harry Hayes; our architects and general drafting force; and our engineering accountant, Mr. George Clark, who wrote practically all of the specifications; as well as the men on the job, due credit should be given for the reason that from the lowest paid employee up everyone took an interest in his portion of the work and handled it as if he owned it.

UNION PASSENGER STATION

Topic for April Meeting

About 100 members and guests of the Los Angeles Section of the American Society of Civil Engineers attended a preview of the Terminal and environs on the afternoon of April 12, 1939. Mr. George F. Bidwell, assistant engineer to Alexander J. Barclay, conducted the group through the terminal. Mr. Bidwell deserves commendation for his graciousness and explanations which he gave and for his thorough and detailed answers to all questions. In the evening President H. Macy Jones discussed early developments leading to the construction of the Union Terminal. Mr. Joseph G. Hunter, M.Am.Soc.C.E., Assistant Director and Chief Engineer, Transportation Department, California State Railroad Commission, was unable to be present, due to illness.

In 1916 the City of Los Angeles gave $20,000 to help defray the expenses of an engineering board to make a preliminary investigation. All the engineers connected with the construction of the Terminal have been unanimous in their expression of the harmony which existed all through the construction period. Mr. Alexander J. Barclay, M.Am.Soc.C.E., Construction Engineer in Charge of the terminal facilities for the three railroads spoke of the thorough co-operation among all concerned at all times. As one speaker said, even the orange trees are there which Mr. Durling wrote about in his column, and which Mr. Durling is invited to view at any time.

In the evening of April 12, 1939, at the Section meeting a number of speakers gave the history, details and features involved in attaining and building the Terminal. The interesting and fact-giving papers presented are printed in this issue.

One engineer has spoken a great number of times upon the project without any written paper, knowing his subject so thoroughly. Excerpts of his address are given. This engineer is Mr. Milton C. Blanchard, M.Am.Soc.C.E., Chief Engineer of the Santa Fe Railway, Coast Lines. He was Resident Chief Engineer on the project, also executive officer on the construction of the terminal buildings and Chairman of the Engineering Commission. He arrived in Los Angeles in 1929. Numerous plans were made as all parties had to be considered and their requirements dovetailed into one comprehensive scheme. The present plan is capable of enlargement into a double end station, one and one-half the present capacity.

September 11, 1933, the Presidents of the Santa Fe, Southern Pacific and Union Pacific Railroads adopted a working agreement. The cost was divided as follows: Southern Pacific—44%; Santa Fe—33%; and the Union Pacific—23%, approximately. On September 23, 1933, a construction organization of the three railroads was completed, with Mr. A. J. Barclay at the head. This organization carried on the work except the station, which was let out to contract. Unanimity of opinion was required by the State Railroad Commission, which involved a great amount of work from all concerned. In addition to the costs borne by the railroads, Los Angeles spent about $1,000,000 constructing the required subways and street improvements.

Los Angeles Celebrates

Los Angeles loves a celebration—perhaps a survival of the old Spanish custom of fiestas, or perhaps just another way of entertaining our visitors and supplying good copy to the daily papers. New York and San Francisco are having Expositions this year, and in her own way Los Angeles is having a miniature fair in the excitement attendant upon the opening of the new Union Passenger Terminal, an event that has been awaited now for eighteen years. This opening has been the occasion of much reminiscing on the part of the old-timers and much prophesying by the young leaders of the city as to the future importance of our once tiny pueblo of Nuestra Senora la Reina de Los Angeles.

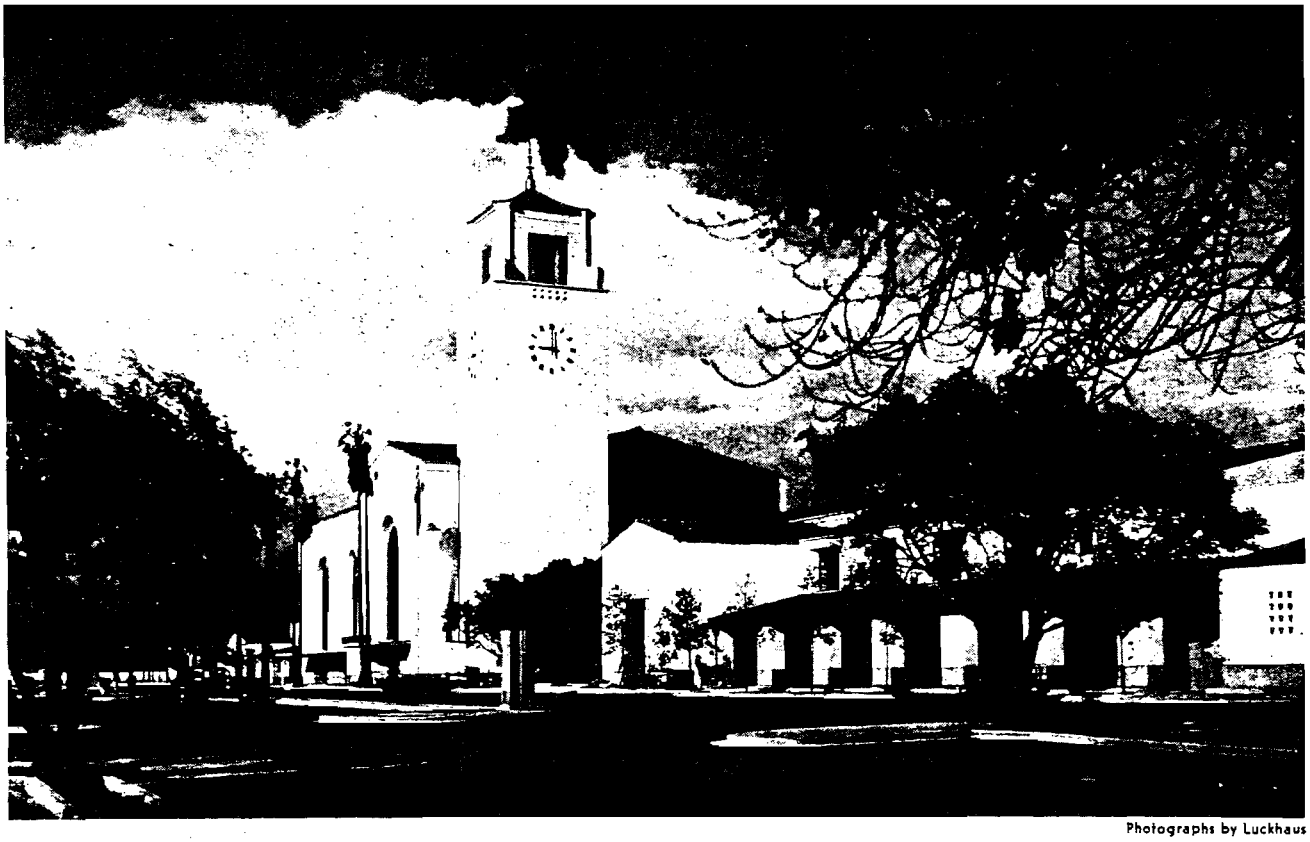
There was a good bit of running and jostling by some people in the effort to be "firsts" in one thing or another. A printer from Whittier jumped out of a window of the first train as it entered the station, thereby being the first passenger to arrive and anticipating the Mayor of Brawley, who was standing ceremoniously waiting for the train to come to a stop. Altogether, the opening was attended by several hundreds of thousands and the station still continues to be a great attraction even though the regular service has begun. The public generally was impressed with the size of the building, the wide use of bright colors in tilework, and the quality of the furnishings and appointments.

Another group, none the less interested, but a bit more exacting and critical were the architects who attended the May meeting of the Southern California Chapter, which was held on the mezzanine of the main dining room of the new Terminal. It was a bumper turnout; eighty members and guests being present. After an excellent filet mignon had somewhat mellowed our hyper-critical faculties, the group filed out for a tour of the building, Architect Donald Parkinson and Maintenance Engineer Meigs.

While I am not one to dwell upon the idea of Los Angeles as a community unique, it is nevertheless difficult to compare this Terminal with the passenger stations elsewhere. Certainly, I know of no other city in which the arriving passengers leave the station through an open patio, filled with bright flowers and shady pepper trees, and flanked by tall palms. This scheme undoubtedly originated with the local publicity men, but they have certainly hit upon an ideal introduction to Southern California. Balancing this, on the other side of the main waiting room, is another patio for women and children, with lawns and orange and eucalyptus trees. At this point in the trip as we stood bareheaded in the balmy air of the evening listening to an account of how many yards of concrete went into the building, a woman passing by remarked, "These Communists, why do they let them hold meetings in here!" I guess architects aren't so impressive after all.

As far back as the late Twenties, Spanish was no longer considered a smart architectural style, and it is not used much any more even by the speculative builders. So that when it was generally learned that the railroads had voted to clothe the steel frame in Spanish dress, the more progressive members of the profession threw up their hands. If the station, however, is viewed in a calm state of mind, and with the understanding that every part of the building is a compromise expression of the wishes of the staffs of three different railroads, the result may be found rather pleasing, and certainly far better than many of the large structures done here during the height of the style.

It will be interesting to see whether or not the convenience of a union terminal and the glamour of a new station can popularize in Los Angeles, where the automobile is king, the use of the railroads for distances shorter than transcontinental. PAUL HUNTER



Photographs by Luckhaus

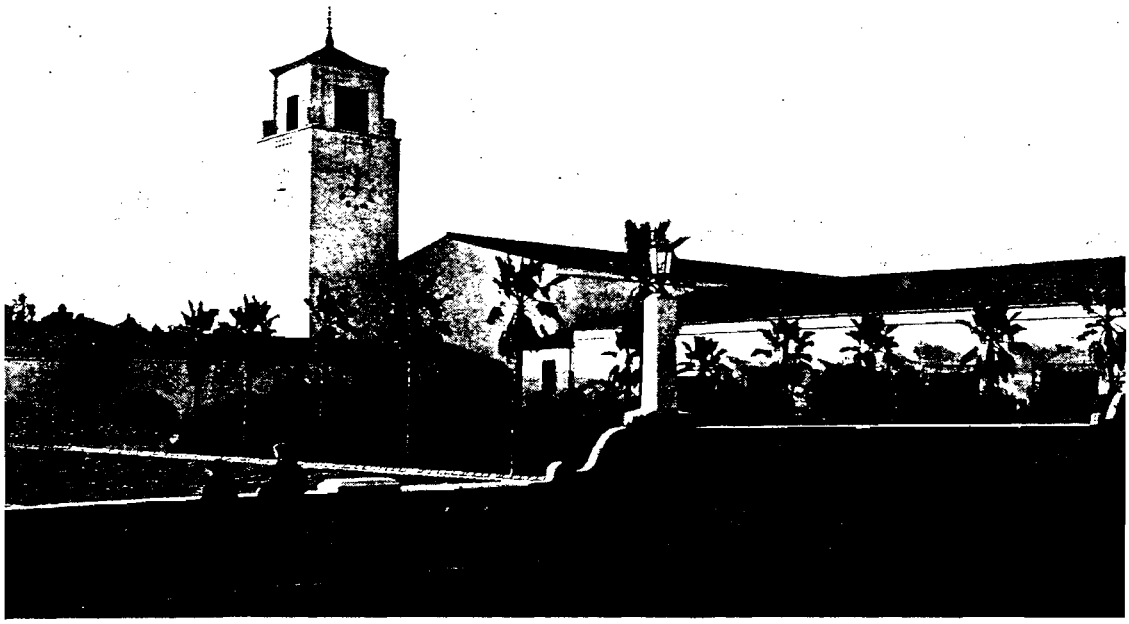
THE LOS ANGELES UNION PASSENGER TERMINAL

John Parkinson and Donald B. Parkinson, A.I.A., Consulting Architects

Herman Sachs, Color Consultant and Designer

Tommy Tomson, A.S.L.A, Landscape Architect

Robert E. McKee Company, Builder



A DREAM COME TRUE

By CHARLES R. LITTLER

WE were on our way to the reviewing stand for the parade celebrating the completion of the Union Station and when we came to the plaza, my friend said, "There's the old Pico House. Mother and father stopped there on their honeymoon. It was tops in those days."

They began really streamlining the pueblo when they built the city hall, and now, a few paces beyond the colorful old plaza of *El Pueblo de Nuestra Señora la Reina de Los Angeles* stands the railroads' contribution—the new Los Angeles Union Station, which officially opened on Sunday, May 7, 1939—America's newest and most complete railroad terminal. You will not find it a massive sky-scraping structure. Rather, it is as though the dons of days gone by had come to us and, with twentieth century vision had said: "Let us show you the way," and had proceeded to do just that. Architecturally beautiful and typically Californian in aspect, the new station is both spacious and ultra-modern in every detail of equipment and design. The physical setting of the entire achievement bespeaks the glamor of the Southland. You will see trees—orange, olive, palm and pepper—rooted in native soil, blending so harmoniously with the man-made structure itself that you will believe the entire ensemble has always been as you see it today.

The Union Station, which cost the three railroads—Southern Pacific, Santa Fe and Union Pacific—something like eleven million dollars, was designed by the architects of the three companies, J. H. Christie, H. L. Gilman and R. J. Wirth, with John Parkinson and Donald B. Parkinson as consulting engineers. Construction was begun in 1933, so you will see it was not just another building project. There may be bigger railroad stations, but there is none more complete, nor as handsome.

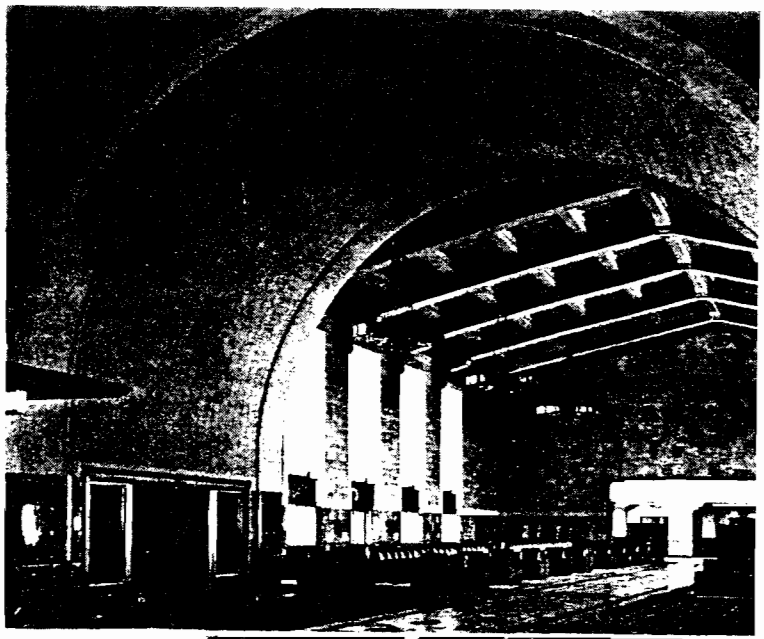
Buildings, tracks and ramps cover an area of 48 acres. The station building itself extends 850 feet along Alameda Street. Its tower rises a full 125 feet above pavement level; the ceiling of the main waiting room is 50 feet in height.

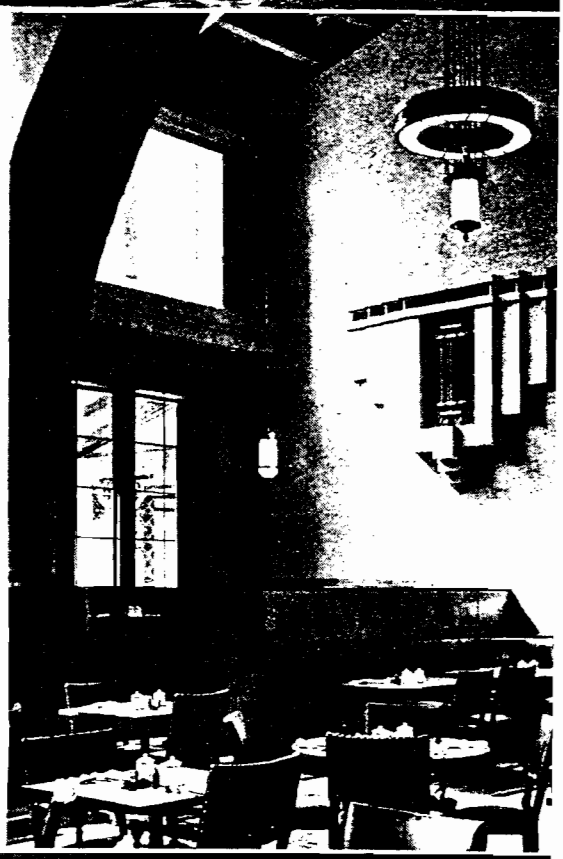
The great entrance vestibule opens upon impressive halls with magnificently arched ceilings and mosaic floors created from marble brought from Vermont and Tennessee and far-off Belgium, France and Spain. These, artistically combined with Montana travertine are suggestive of immense carpets. Over-doors and window panels are created in French marble. Belgian black marble, tile wainscot and travertine form a border on the walls. Painted ceiling panels and trusses conform in tone and design. All woodwork throughout is fashioned from genuine American black walnut. Grilles are of wrought iron, bronze trim for doors and windows, with the balance of metal work in satin finish aluminum.

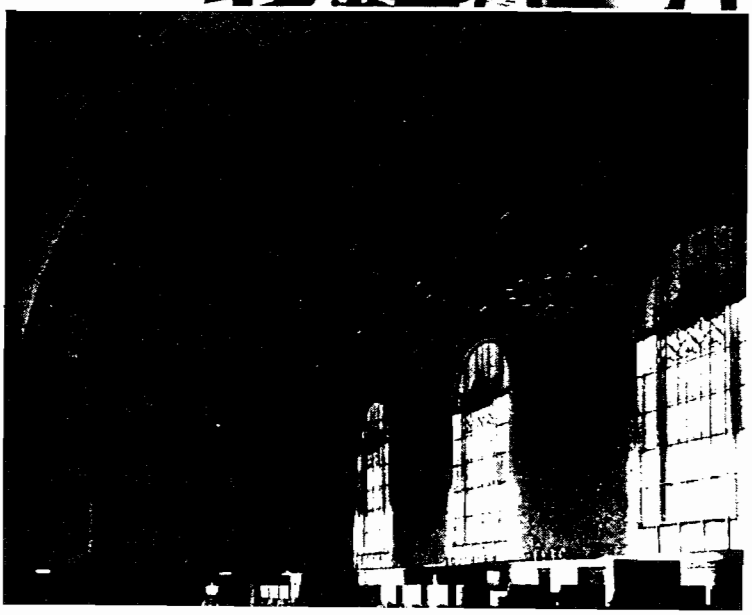
Along with its completely fascinating layout, the Los Angeles Union Station is also one of the most workable in facilitating the movement of traffic. Ten train gates open onto a wide, laned passageway leading to and underneath the tracks. Thus is provided 16 sets of tracks, each capable of taking care of the longest trains. Besides these there are tracks for mail, baggage and express, tracks for private cars, storage and switching tracks—in all, 39 sets of tracks. The train yard is equipped with the most modern operating and signaling devices. All switches are controlled by an electric pneumatic interlocking plant, with the interlocking machine located in a three-story tower. The electric locking devices make it impossible to direct trains over conflicting or occupied routes.

The acoustics throughout the station building are superb. A peaceful, tranquil atmosphere permeates the entire structure and it is difficult to believe you are in a busy mart of commerce; it is a far call from the "depot" of other days. Announcements covering trains are made over a broadcasting system through loud speakers, strategically located. Between formal announcements, and with

(Continued on Page 40)







Index to Advertisements

A DREAM COME TRUE

(Continued from Page 29)

intelligent supervision and judgment, radio programs and recordings are broadcast, all handled by an operator in a control room. Persons may be paged by this operator in any part of the station proper.

Two patios, one on the south and one on the north of the main waiting room, are beautifully landscaped and offer a quiet retreat for a restless soul. The landscaping of the station is one of its fascinating and outstanding features and acts as a fitting introduction of southern California to the stranger, and as a pleasant last memory of its beauty to the ones going away.

The Los Angeles Union Station is new, and in its modernity and completeness will be as new tomorrow and for a long time to come. The atmosphere of tranquillity and understanding dominating this 1939 achievement, so clearly influenced by the spirit, hospitality and tradition of the Californians of days gone by, should never change. But, inevitably, some one will say of it, as our friend said to us on the day we celebrated its opening, "That's the Union Station. My mother and father began their honeymoon trip there, sixty years ago."

At the home of Mr. and Mrs. D. W. Whi the terrace and barbecue open out fro dining room and are protected in an ell house. Arthur Munson, architect.

THE JOY OF GARDEN GRILLS

(Continued from Page 17)

and pleasure and comfort.

It is not the province of these lines t nish structural directions for the fashion outdoor grills, for two well-known g magazines have lately performed that s very well. They have, however, had lit nothing to say of the satisfactions that g possession of such simple and comparativ expensive aids to full and graceful living.

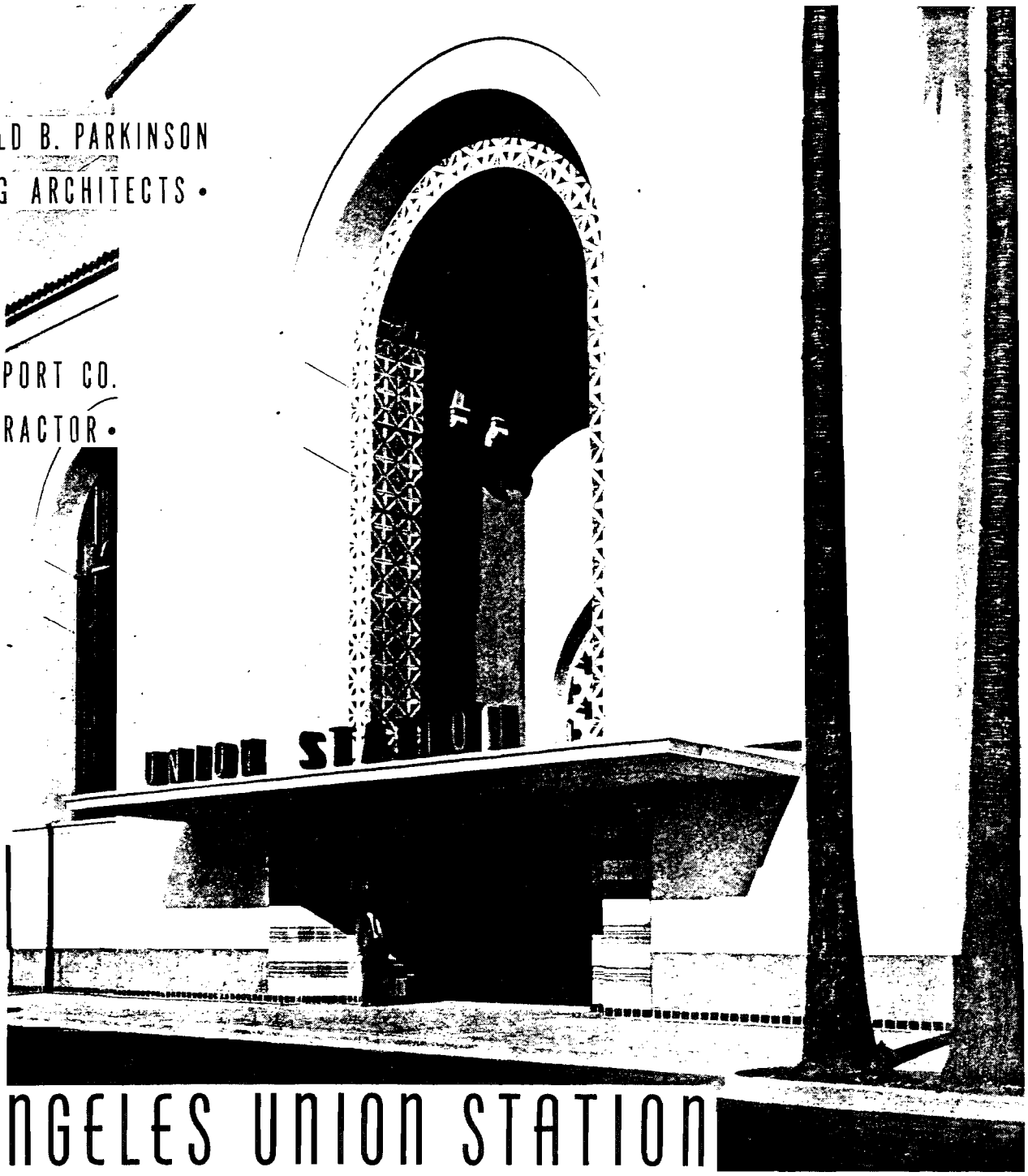
Even if a grill is used but once or t year, still it is a paying investment just f look of hospitality it contributes to a g Even if it were never used at all, yet it serve good purpose as stage setting, j well-placed garden benches do, that may be sat upon, yet seem to invite the guest.

In such a case, however, no time sho lost to smoke the grill and blacken it This advice might seem superfluous, h the writer lately seen half a dozen suc had, even after a year or two or three, known a flame, and looked, therefore, as as a natural brunette with platinum hair

Sometimes we hear the objection tha den dining is unsatisfactory because it a the pestiferous flies. That is a proble indeed to settle, if one but knows the "s by planting a bed or two of Mignonett by the eating place; or, if that is not f by decorating the tables with generous of that modest, pretty flower whose perf so delightful to man. For flies cannot al and will not go near it even for the tempting meal a garden grill can offer.

HN & DONALD B. PARKINSON
CONSULTING ARCHITECTS •

RADE & IMPORT CO.
TILE CONTRACTOR •



OS ANGELES UNION STATION

Tile offers a lifetime of beauty and satisfaction with its warm, glowing colors . . . dignified simplicity . . . wide variety of shapes and sizes. Time will prove the wisdom of using Gladding, McBean & Co. tile in this outstanding building.

Decorative tile is used in the handsome arched entrance . . . wainscot . . . benches . . . cool, shady patio. The great expanse of tile in the main lobby, in the efficient kitchens and public rooms extends a warm welcome to the visitor in California.

LADDING, McBEAN & CO.

AN FRANCISCO • LOS ANGELES • SEATTLE • SPOKANE • PORTLAND • VANCOUVER, B. C. • HONOLULU, T. H.

THE LOS ANGELES UNION PASSENGER TERMINAL

A night view of the new Los Angeles Union Passenger Terminal is dramatically effective with all the romance of going away, of the excitement of welcoming returning friends.

JOHN PARKINSON & DONALD B. PARKINSON, A.I.A.
Consulting Architects

TOMMY TOMSON, A.S.L.A., Landscape Architect

ROBERT E. McKEE, Builder

HERMAN SACHS, Color Consultant & Designer

The following reliable concerns are proud of their part in the construction of this outstanding building:

Decorative tile, floor tile,
Mammoth glazed tile, tile panels.
GLADDING, McBEAN & CO.
2901 Los Feliz Blvd., Los Angeles

Sisalkraft supplied by
SAN PEDRO LUMBER CO.
1518 S. Central Ave., Los Angeles

Acoustical Engineering
HAROLD E. SHUGART COMPANY
7470 Santa Monica Blvd., Los Angeles

All Mechanical Piping
fabricated and designed by
ASSOCIATED PIPING & ENGINEERING CO.
2332 E. 38th St., Los Angeles

Decorative Lighting Fixtures
WAGNER-WOODRUFF CO., INC.
830 S. Olive St., Los Angeles

Fred Harvey Restaurant Refrigeration
BAKER ICE MACHINE CO., INC.
351 S. Anderson St., Los Angeles

Venetian Blinds, Hand and Electrically Operated
NATIONAL VENETIAN BLIND CO.
1770 Sichel St., Los Angeles

Concrete Piles
RAYMOND CONCRETE PILE CO.
Washington Bldg., Los Angeles

Conveyors and Material
Handling Equipment
STEPHENS-ADAMSON MANUFACTURING CO.
2227 E. 37th St., Vernon

Ornamental Iron and Bronze
ARCHITECTURAL METAL WORKS
1667 E. 23rd St., Los Angeles

All Elevators and
Dumbwaiters installed by
KING MACHINE & MANUFACTURING CO.
1171 E. 32nd St., Los Angeles

Asphalt Paving by
GRIFFITH COMPANY
1060 South Broadway, Los Angeles

Cabinet and Counter Work
PETERSEN SHOW CASE & FIXTURE CO., INC.
5700 S. San Pedro St., Los Angeles

Large Trees
R. W. HAMSHER
9760 W. Pico Blvd., Los Angeles

Specimen Trees and Tree Surgery
SMITTER TREE COMPANY, INC.
8526 Beverly Blvd., Los Angeles

Franciscan Flagstone
OLD MISSION QUARRIES
8181 Beverly Blvd., Los Angeles

Architectural concrete walls are used throughout the Los Angeles Union Passenger Terminal Buildings planned and designed by Architects H. L. Gilman of the Santa Fe, J. H. Christie of the Southern Pacific, and R. J. Wirth of the Union Pacific. John Parkinson and Donald B. Parkinson, consulting architects. (Inset) Characteristic wall texture obtained with Celotex form lining.

For Beauty with Economy the gateway to a city is built with CONCRETE

Los Angeles intended its new Union Passenger Terminal to be more than a suitable railroad station. It is an expression of the spirit and architecture of a progressive city. And, as in thousands of other structures, an aesthetic ideal was achieved without any sacrifice of economy by building with concrete.

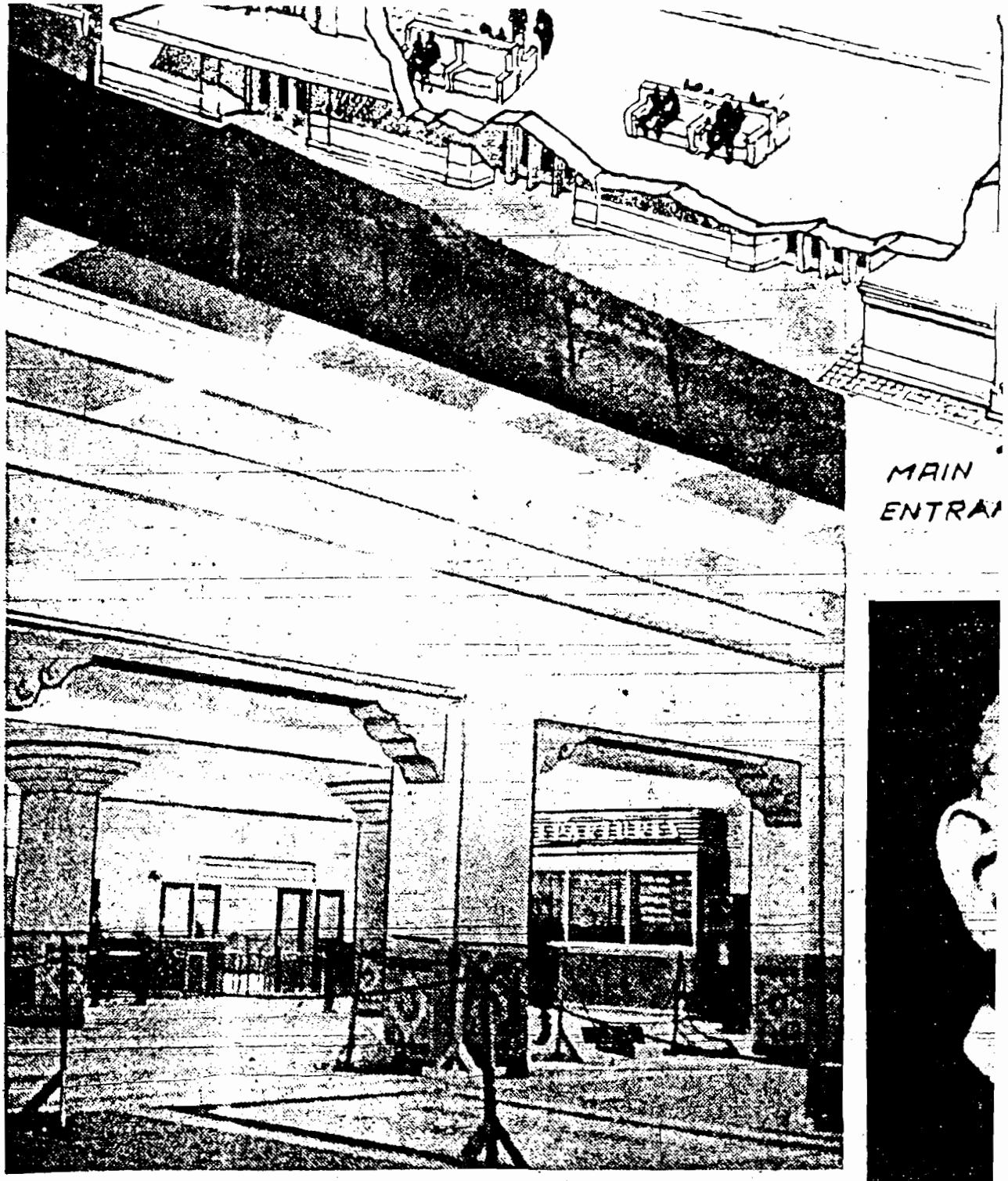
Concrete is adaptable to buildings of any size, any style. It takes practically any decorative shape or wall pattern desired. It saves on maintenance. It keeps first cost low because walls, frame, floors and detail are cast as a firesafe, 'quake-resistant unit in one economical material. Investigate concrete for your buildings.

Architectural Concrete

. . . ARCHITECTURAL AND STRUCTURAL FUNCTIONS COMBINED IN *ONE* FIRESAFE, ENDURING MATERIAL

PORTLAND CEMENT ASSOCIATION Dept. 16-9, 816 West Fifth Street, Los Angeles, Calif.

A national organization to improve and extend the uses of concrete . . . through scientific research and engineering field work.

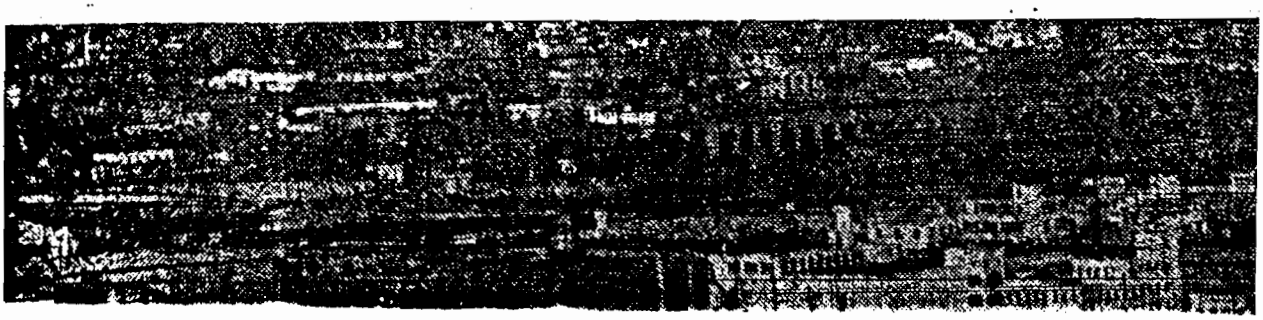


MAIN
ENTRA

Panorama of Union Station

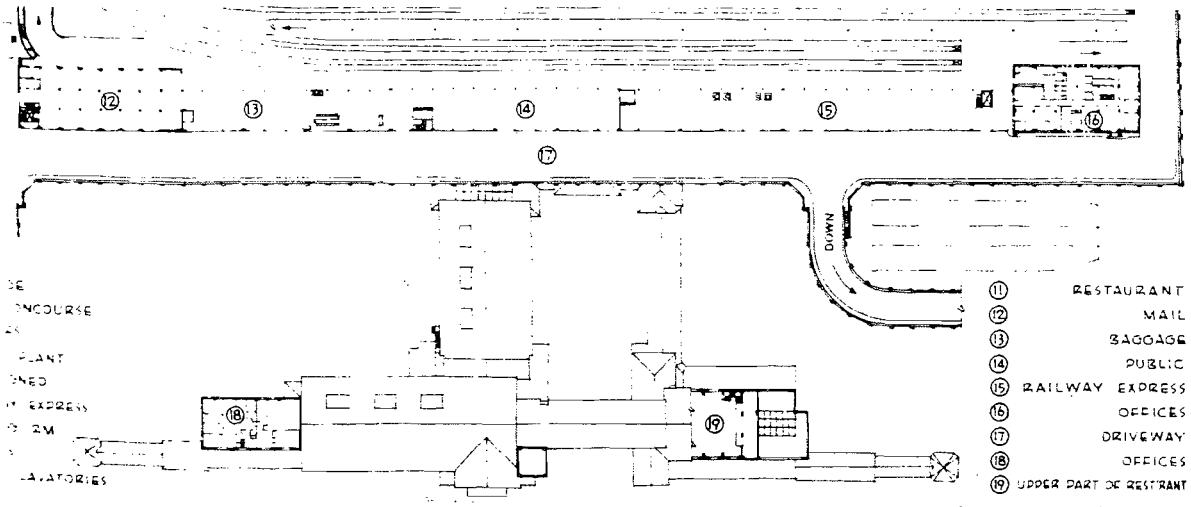
Below is an aerial view of Los Angeles' new Union Station, looking toward its Alameda Street main entrance, with train sheds in the rear.

Henry W
and civic
man of
opening

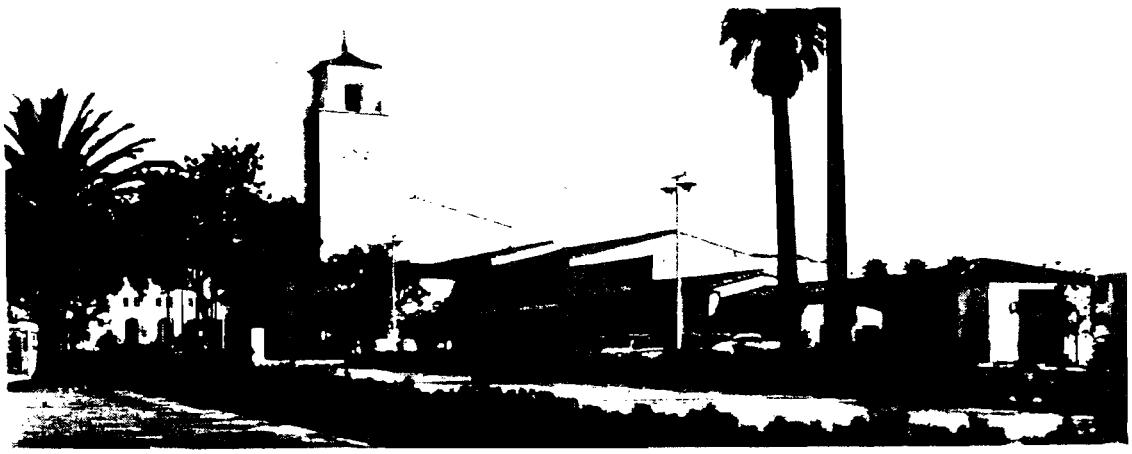


RAILROAD STATIONS

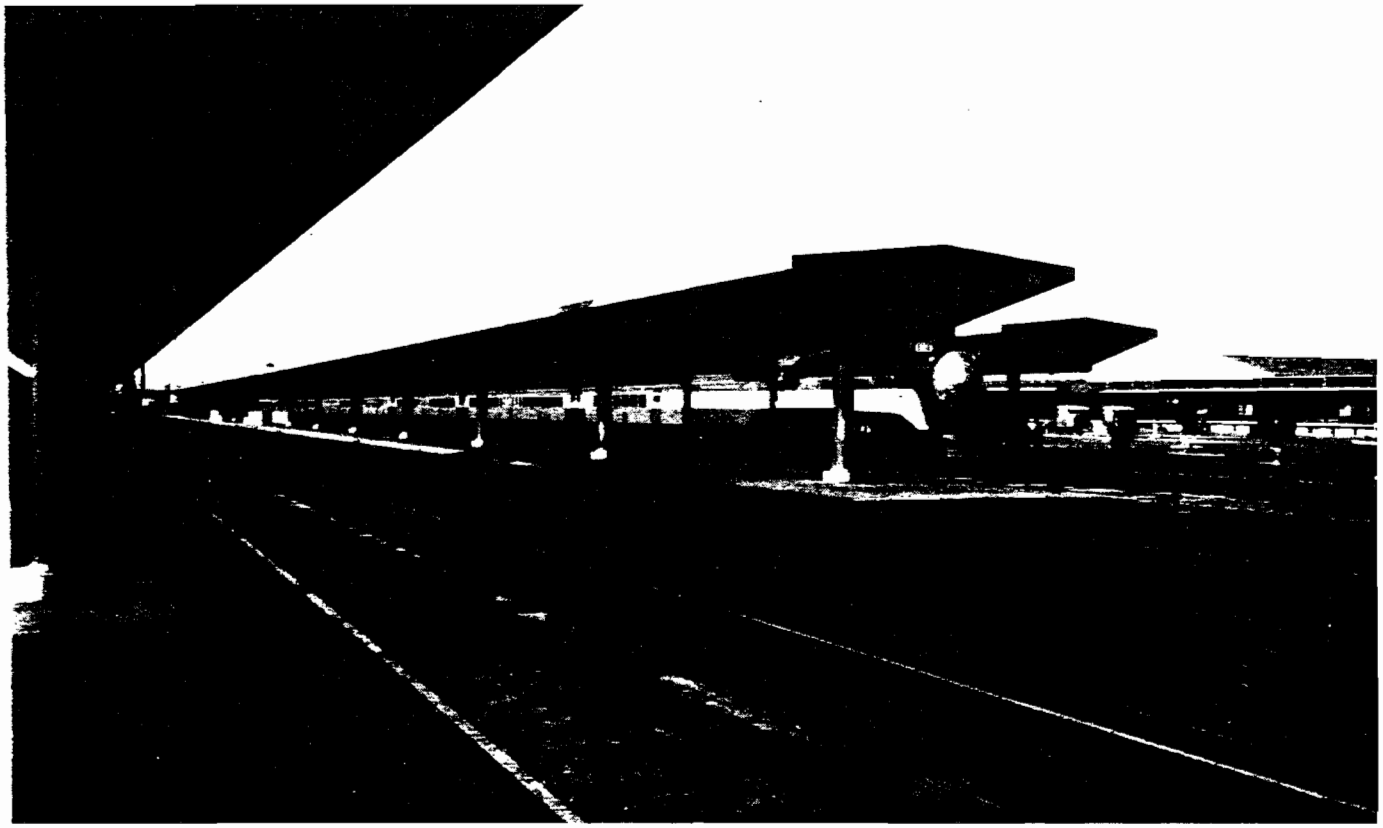
MAIN WAITING ROOM



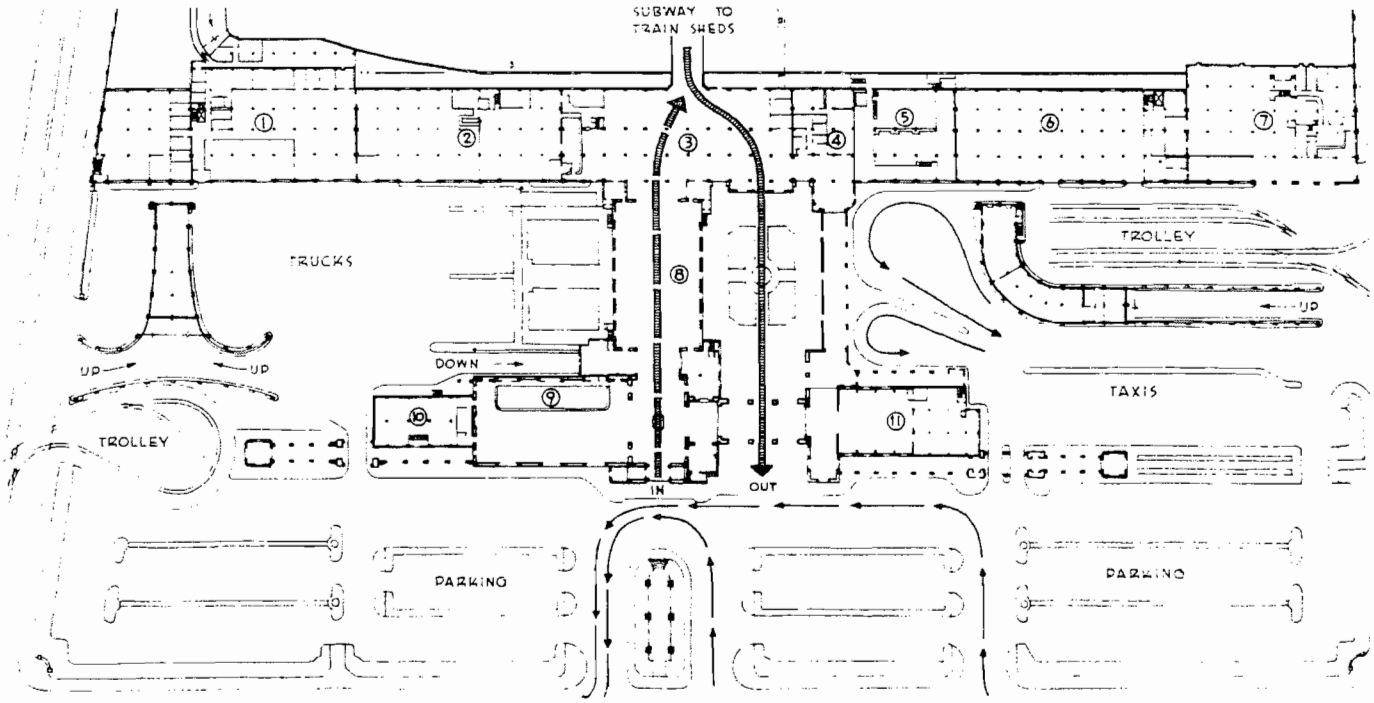
UPPER (TRAIN SHED) LEVEL



ERAL VIEW showing
ng area in foreground



TRAIN SHEDS



J. H. CHRISTIE, H. L. GILMAN, R. J. WIRTH, ARCHITECTS; DONALD B. AND JOHN PARKINSON, CONSULTING ARCHITECTS: UNION PASSENGER TERMINAL, LOS ANGELES, CALIFORNIA. Providing for present and future needs of one of America's fastest growing cities, the new Terminal is designed to provide for the freest possible movement of incoming and outgoing passengers, baggage, and mail. Important to achieving this flow are the unusually large parking areas, and the separation of taxi, private car, and truck traffic. Typical of climate-conscious Los Angeles are large patio waiting rooms.

CULTURAL HERITAGE BOARD
Room 1500
CITY HALL

NOTICE

By order of the Cultural Heritage Board dated August 2, 1972, the following described property within the City of Los Angeles has been found and determined to be worthy of preservation as a historic-cultural monument, in accordance with the provisions of Ordinance No. 121,971:

UNION STATION TERMINAL AND LANDSCAPED GROUNDS EXTENDING FROM ALAMEDA STREET ON THE WEST, TO ALISO ON THE SOUTH, TO MACY ON THE NORTH, TO THE BEGINNING OF THE EXISTING TRACKS ON THE EAST, 800 N. ALAMEDA STREET
HISTORIC-CULTURAL MONUMENT NO. 101

Three of the nation's major railroads, Southern Pacific, Santa Fe and Union Pacific, who today own the Union Station Terminal, pooled their resources in 1933 and proceeded with the construction of the Station. The consulting architects were John and Donald B. Parkinson, a father-s architectural team. Although the senior Parkinson died before the structure could be completed, Donald Parkinson saw the $11 million bull officially opened to the public on May 7, 1939. It was praised by the local press as "the epitome of architectural splendor and ultra-modern efficiency.....the last word in speed, convenience and comfort." Three days of elaborate festivities marked the official completion of the building - each day drawing an estimated half a million people.

The main waiting room measures an awesome 52 feet from the floor to the highest point in the ceiling. It has immense arched windows laced with elaborate iron work; multi-hued marble floors and exquisitely patterned tiles.

Viewed from the outside, the station is a low rambling structure of Spanish and Moorish architecture, with a tall clock tower and red tile roofs. Square red brick tiles pave the walkways and corridors. Two patios, one on the south and one on the north of the main waiting room, are beautifully landscaped and offer a quiet retreat. The landscaping of the station is one of its fascinating and outstanding features and acts as a fitting introduction of Southern California to the new arriva

For even the most sophisticated traveler, the Los Angeles Union Station Terminal, typically Californian in aspect, is likely to evoke some of t excitement and nostalgia of days gone by. Its recognition and preserva is important to those countless individuals who will never witness Los Angeles as it existed during the Era of the Great Railroads.

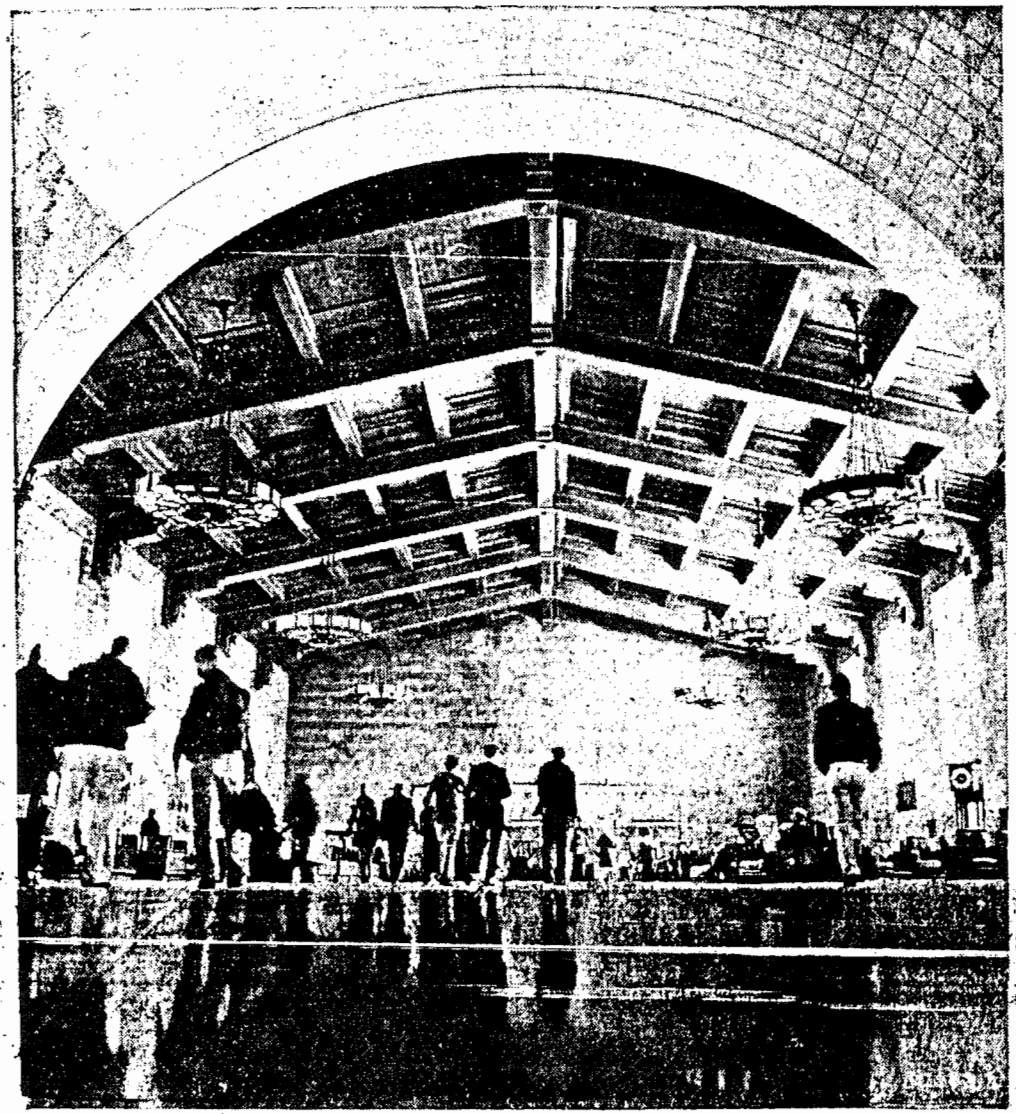
The reasons for inclusion of said property in the list of historic-cultural monuments are set forth in connection with the description of t property as set forth herein above.

Notice is hereby given that no permit for the demolition, substantial alteration or removal of said described property shall be issued and none of said described property shall be demolished, substantially altered or removed by the City of Los Angeles, except in accordance wit the provisions of Ordinance No. 121,971.

August 8, 1972
IW:db

Signed: CARL S. DENTZEL
President, Cultural Heritage Board

L.A.'s Union Station Conjures a Trainload of Memories



CHANGING TIMES—Crowds of commuters once jammed the Los Angeles Union Passenger Depot.

BY BOBBIE JUSTICE
Times Staff Writer

The Coast Starlight had just pulled out, and I headed down the ramp to the concourse at Union Station.

My steps echoed through the empty tunnel as the roar of diesel engines subsided in the distance.

The waiting room, equally empty, was as quiet and somber as a vast cathedral. A vault of memories. A temple filled with lingering emotions of days gone by.

Sunday, May 7, 1939—a happy day for Los Angeles:

The first passenger train rolls into the new Los Angeles Union Passenger Terminal at 5:15 this morning. Steam surges from the engine like a magic act ushering in a new era.

This is the end of a 30-year battle of civic leaders pushing for the handsome station, the railroads resisting.

On this long-ago day the arguments are over and Union Station stands in all its grandeur like a monument of victory. It has taken more than two years to build, the cost exceeding $11 million.

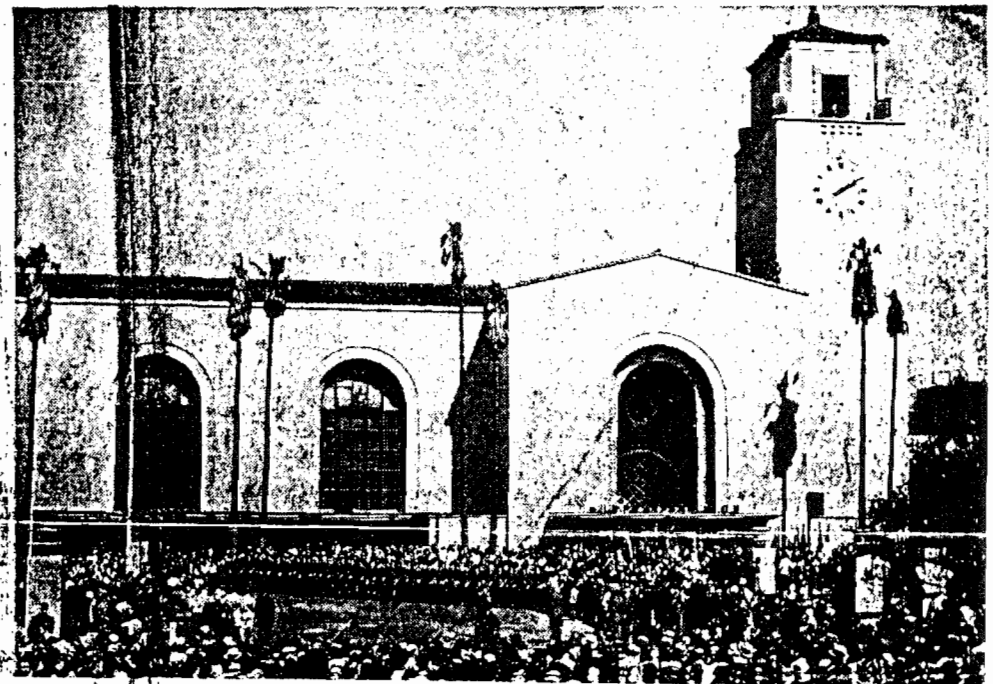
Parking lots, miles of tracks, freight and mail docks are part of the sprawling complex that covers more than 40 acres. Best of all, though, is the Spanish, tile-roofed terminal building with shiny marble and tile floors, towering ceilings with massive wood beams, landscaped patios and the imposing clock tower that rises 125 feet.

The dedication celebration began midweek. An exciting pageant called "Romance of the Rails" played for three days. Thousands turned out to watch it. There was speech-making by civic leaders and officials of the three railroads: Santa Fe, Southern Pacific and Union Pacific. There were floats, a parade, bands and celebrities.

It appeared that the whole town was there.

About 2 million people wandered through the passenger terminal that

Please Turn to Page 8, Col. 1



HISTORIC DAY—Dedication ceremonies drew thousands to 1939 opening of railroad terminal

UNION STATION MEMORIES

Continued from First Page

first year to marvel at its beauty and size. Trains were coming and going every few minutes—in all, 66 arrivals and departures a day. As many as 15,000 people might board a train on a warm summer day, and about half as many in winter.

The trains had character, personality. Rather than numbers they were known by names: Tehachapi, Scout, Navajo, Super Chief, Grand Canyon Ltd., Challenger, Owl, Argonaut. Everybody who was anybody rode the rails then, and great feelings of affection grew for the giant iron engines and the drab-colored passenger cars that followed.

While Union Station was busy those first couple of years, no one could imagine the next few years: the activity, chaos, sorrow and sometimes joyful scenes World War II would bring.

The year, 1943. It's midafternoon and each of the deep leather chairs in the waiting room is taken. An Andrews Sisters' record has come alive over the P.A. system—not too loud because soldiers, sailors and other weary travelers are trying to catch a few winks before they move on to their uncertain futures.

In the crowd, sailors who haven't found seats are curled up to their sea bags on the floor. Several soldiers are stretched out in the sun on the patio.

"Don't sit under the apple tree with anyone else but me . . ."

A heavy-set woman stands quietly beside her son—a fixed smile holding back the tears until the goodbys are over. The boy, only a teen-ager, is immaculate in his Navy whites. He's excited, sad. Yes, and apprehensive. Again, the uncertain future.

A young Army lieutenant stops to pick up a baby bottle that drops from the diaper bag of a teen-aged mother, and the Andrews Sisters are interrupted by announcement of a train arrival on Track E.

". . . anyone else but me, anyone else but me . . ."

Two Army privates rouse themselves from the chairs where they've been dozing and move reluctantly through the crowd to the rear of the station.

A marine sergeant in his early 20s rests his crutches against the wall while he rummages through his pockets for his ticket. He hardly notices the couple next to him, two sweethearts embraced in a kiss—one that may have to last forever.

". . . till I come marching home . . ."

Including troop trains, there were often as many as 100 trains operating in or out of Union Station in those days.

Then the war was over. Servicemen came home, their spirits as high as the vaulted ceilings of the train station.

Other homecomings weren't so happy. On some days there were as many as 20 bodies that passed through the baggage area of Union Station.

Life was to change. Freeways were to be completed and cars built. Airlines were to whisk people across the country in a matter of hours.

Train service was to diminish.

Amtrak's top official at Union Station today is Floyd L. Rogers, assistant trainmaster—Southwest Division. He was a high school student in 1939 when Union Station opened, and his class took a field trip to the new facility.

"I cut class that day and instead took two girls surfing at Malibu," Rogers recalled. "I didn't realize I'd spend a third of my life here."

He supervises the activities of 65 employes. Today there are eight trains: The San Diegans offer five southbound and five northbound trips daily to and from San Diego and intermediate points; the Sunset Limited (formerly the Super Chief) operates to and from Chicago; the Coast Starlight runs between Seattle and Los Angeles, and the three-times-a-week Sunset Limited serves New Orleans. During June, and again in July, between 70,000 and 85,000 people boarded these trains.

As of April 1 Amtrak has a five-year lease on most all of Union Station.

At the south end of the building in room 302 is the office of R. L. Pfister, superintendent of the Los Angeles Union Passenger Terminal (LAUPT), an agency comprised of the three railroads that built Union Station.

Pfister and his staff of six are the only occupants.

"In the old days our suite of rooms was the telegraph office," he explained. "And the rooms down each side of the hall were for conductors. Each railroad had its own area. The Pullman Co. was at the end of the hall."

Within the last two years the auto ramp leading from Macy St. and the loading docks above were a traffic beehive with REA Express and mail trucks. Then came REA's bankruptcy and cancellation of the mail contracts.

Now the area is desolate, ghostly.

ON TIME—Checking onto sleeper in wartime.
Times photo

At least five tracks nearest the terminal building have been removed (possibly for tax reasons) and other areas of the building have been partially stripped. Telephones are missing from the fine old wooden booths in the front of the terminal. Several stalls in the rest rooms have been boarded in. More than half of the chairs in the waiting room have been removed, the remainder rearranged.

The information booth at the main entrance once was manned by four employes. Now the counter gathers dust.

Often standing near the booth is one of the railroad policemen who willingly gives directions while keeping an eye on activity at the ticket counters and throughout the waiting room.

One of the officers reminisced about the mid-'40s when he came to Union Station. He described the big Fred Harvey restaurant and cocktail lounge which once did a booming business. It's empty now, with only the old U-shaped counter and four large Art Deco chandeliers. Signs over the doors still spell out "Cocktails" and "Restaurant."

Another bar and cocktail lounge did business where the gift shop operates, and there was a steam table in the coffee shop across the way.

Mary McCarthy, a retired high school teacher, manages the coffee shop today. There's a stand-up counter in the back where customers spread pickle relish and mustard on about 20 pounds of hot dogs each week. She also sells sandwiches, donuts, cottage cheese, yogurt, milk, soft drinks and candy bars.

"We really need a place where people can sit down," she said, "but we can't do anything until we work it out with Amtrak under the new lease arrangement."

In the gift shop nearby is Ed Harris' excellent collection of miniature railroads. His first experience with the rails was with the Pennsylvania Railroad as a fireman in 1918. Today he runs his miniature train shop on a nonprofit basis, donating proceeds to the Shrine Children's Hospital.

Harris is among the people who use the trains to commute to work, taking the San Diegan to and from Santa Ana. But he plans a vacation trip in September.

On a two-week rail pass he intends to visit Seattle, east to Montana, North Dakota, Minnesota, Chicago, New Orleans and Houston.

"It's a long trip, but I've figured it out and know I can do it in two weeks. Actually, it'll only take 12 days," he said.

There's an entire row of wooden ticket windows north of the information booth. Usually only three or four are open.

In line the other day was G. E. Lansdowne buying a ticket to Jefferson City, Mo., to attend a family reunion.

Although Lansdowne could have bought a plane ticket to Kansas City for $212, he paid $352.50 for his train ticket, requesting roomette.

"I have been using planes, but it's been 20 years since I've been back to Missouri, and I want to see the country again," he said wistfully.

Standing near the ticket windows was Howard Campfield. He was vacationing from Orlando, Fla., and had stopped by with his grandson after touring Olvera Street.

UNION STATION

Continued from 8th Page

"There were always crowds here," she said, recalling the mid to late '50s when she often traveled with her husband in the Army.

"Mothers spent a lot of time looking for their kids. You'd turn your back and they'd be lost in the crowd. When I walked over here today I didn't have any idea we'd find it so vacant. It's like a ghost town."

During the '40s and '50s thousands of movie celebrities passed through Union Station.

Among those who treasure their memories is Alice Davis, who came to Union Station as a matron and maid 30 years ago. Now a travel clerk, she became the first lady red cap at Union Station.

She also remembers the frequent arrivals of displaced persons from Europe in the late '40s and early '50s.

"They had tags on their wrists. Harold Washington, a redcap who spoke about 14 languages, would separate them from the other passengers, line them up out there on the patio and see that they got with their sponsors.

"I'll never forget some of the sorrowful looks on their faces . . ."

Redcap Paul Richards claims to have the signature of every star who hit the screen between the '20s and '50s. A lot more young people ride trains today, he says, but much of his time is devoted to older people and the handicapped. He's one of the redcaps who drives a four-passenger electric cart between the parking lot and the trains.

Nearly everyone who has ever traveled by train has memories. Among them is conductor Samuel Cannon, who's been with the railroads 36 years. He recalls the early '50s when he worked the Del Mar Special between Union Station and the race track near San Diego.

"The year the San Diego Freeway was completed the train ran one or two weeks and then folded," he said. "Everybody got into cars."

He shook his head. "Concrete ribbons are what put us out of business in passenger travel."

But the fact is, passenger trains aren't out of business. True, fewer trains are running and you could fire a cannon through Union Station at certain times of the day. Redcap Richards summed it up best:

"You'd be surprised the number of people who don't know the trains are running. On the other hand, you'd be surprised at the number of people who do."

You hear their footsteps echo through the lonesome halls of Union Station.

Union Station—he Hub of L.A.'s Transit Future?

BY RAY HEBERT
Times Urban Affairs Writer

r nearly three decades Los Angeles Union Station has l as a handsome monument to the past. Now it is likely come the hub of the future.

rambling California mission and Mediterranean-style ture with a landmark clock tower, the station opened in in time to become the arrival and departure point for sands of servicemen and women during World War II.

ith the sharp decline of railroad travel in the 1950s and s, the bustling activity in its huge waiting rooms and on ong passenger platforms slowed to a trickle.

ere has been some revival since Amtrak took over the on in 1971. But it is still a far cry from the throngs riding popular trains of a generation or so ago—the Chief and r Chief, the Sunset Limited, the Lark, Argonaut and en State and the Domeliner City of Los Angeles.

ow, a move is under way to recapture—and intensify—station's once lively spirit and activity. The plan is to ert the faded landmark into a multipurpose transporta- center.

ne California Department of Transportation is taking the and its director, Adriana Gianturco, has given a go- id to acquire the station from its owners—the Southern fic, Union Pacific and Santa Fe railroads.

Caltrans sees Union Station as the key facility for the en- transit program in Los Angeles—the transfer point for ravel modes from busways to the city's planned Wilshire way," she says.

s first steps in the acquisition program, Caltrans is hiring raisers and putting together a tentative financing pack- which will serve as the basis for eventual state owner-

he railroads, which have been leasing the station to Am- , have obtained an appraisal of $18.1 million on the facili- nd related track areas. The figure was derived from stu- made for the railroads by a real estate consultant.

report, completed recently by Caltrans, gives a prelim- y estimated value of $12.4 million. Caltrans added anoth- $1 million for an adjacent parcel owned by the Maier wing Co. Next to the Santa Ana Freeway, it is included in rans' plans for development of the new transportation ter.

he report pictures the new facility as a moneymaker, re- ing an estimated $600,000 a year above operating costs n transportation revenues, restaurants, shops and other cessions.

he difference between the railroads' appraisal and Cal- s' estimate is substantial but a state spokesman does not ard it as a stumbling block. Resolving the difference, he s, would be part of the negotiating process.

erry Baxter, chief of Caltrans' transit development branch e, says the facility could be acquired in a year. If condem- ion is necessary, three years would be required.

lowever, condemnation proceedings are considered un- ely because the railroads, according to an SP spokesman, anxious to get rid of the aging facility.

They have regarded it as a burden—a white elephant—ce the demise of privately operated rail passenger service. is year property taxes alone will cost the Los Angeles ion Passenger Terminal Co., the railroads' joint operating ity, nearly $190,000.

n the last 20 years or so there have been a number of pro- sals, most from private interests, to convert the station to a riety of uses. Some envisioned it as a transportation center. hers proposed redeveloping it as a Ghiradelli Square simi- to San Francisco's famed waterfront shopping complex.

At one time the city thought of using it as a replacement downtown's 53-year-old Central Library.

City officials also have suggested redeveloping the depot's st halls as a Hispanic civic and cultural center, which uld include an Inter-American Museum of Cultural Histo- in the station's abandoned Railway Express Agency build- g—an idea, the Caltrans report says, that would not be in- mpatible with the state's plans.

Caltrans became interested in the station's possibilities for oader transportation usage with development of the re- on's four-part transit plan and its support of improved Am- ak service. The state agency also sees the station as a key k in commuter rail service it is attempting to establish om Oxnard through the San Fernando Valley and on other il routes (in addition to those now operating between Los ngeles and San Diego) to Riverside and San Bernardino.

Ms. Gianturco gave a hint of Caltrans' plans at a party lebrating the 40th anniversary of Union Station last May.

"(The station) is destined to become the major transporta- n center for Los Angeles County," she said. "We believe) has an exciting future where many transportation ser- ces will come together to meet the needs of the traveling blic."

The party brought together civic officials and many rail- ad buffs who remembered the long struggle to build the ation in the 1930s after several decades of controversy and gal hassles.

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Please Turn to Page 3, Col. 1

ARCHITECTURAL LANDMARK—Caltrans hopes to acquire Union Station for transportation center.

LOOKING BACK AND AHEAD—The vast ticketing concourses and tunnel to the station platforms are poorly lighted, and the rambling building is in sore need of restoration and paint, experts say.

Union Station—The Hub of L.A.'s Transit Future?

Continued from First Page

The station, located on Alameda St. between Aliso and Macy Sts., a site that was part of the original Los Angeles pueblo, was formally opened on May 7, 1939.

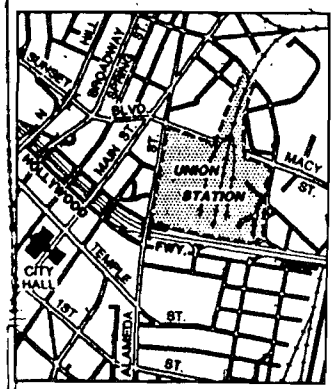
The public celebration lasted for several days as wide-eyed onlookers and railroad passengers, using the facility for the first time, inspected its high-ceilinged ticketing and waiting rooms, its fine restaurant and garden-like patios.

During its early days, including the hectic World War II period, 30 regularly scheduled trains operated daily from the station. Twenty years after its opening, the number had dropped to 21.

Declining railroad patronage forced closure of the Fred Harvey restaurant in 1967. Within a week in 1976, the Caltrans report notes, REA abandoned its freight forwarding facilities behind the main depot and the Los Angeles Union Passenger Terminal Co. lost its mail handling contract.

Only nine Amtrak trains use the station now, including six daily runs to San Diego. Yet ridership, due largely to the rising cost of gasoline, is picking up daily.

Even so, except at departure and arrival times, the depot is a cavernous wasteland, its high windows shuttered and the infrequent sounds of human activity echoing through its huge halls.



Times map

The depot has been allowed to fall into some disrepair, although Caltrans, in its report, found the classic building in sound condition.

The physical problems are—well, like a woman "who just hasn't taken care of herself," an observer commented.

There are places on the exterior of the building where the paint is peeling. The floors are not kept as clean as they once were but this only slightly diminishes the elegance of the tile stone and marble and the mosaics which were a proud design feature of the original structure.

"Safety . . . appears satisfactory inside the passenger station," the Caltrans report says. "In the outside patio areas and underground garage, public safety is questionable due to many hidden areas. Improvements, such as lighting, signing and baggage-handling equipment, will provide added safety."

The portion Caltrans would acquire consists of 36.4 acres—the area bounded by Alameda, Aliso, Macy, Vignes and Lyon Sts.—and includes the main depot, the parking lot fronting on Alameda St., the old REA building, the tracks and platforms behind the station and some empty land on Vignes St.

The package also includes another 7.4 acres where the train platforms extend north of Macy St. and a triangular parcel on Vignes owned by Maier but no longer used for brewing.

The station facility, the Caltrans report says, could be reconditioned for $815,000 but restoring it to "good condition," it was estimated, will cost $3 million to $4 million.

The station already is earmarked as the northerly terminal point for the city's planned $175 million downtown people mover. It will be located on the Maier Brewing Co. parcel with the adjacent vacant land serving as a storage center for the system's vehicles.

The station also has been targeted as the terminal point for another project—Caltrans' planned extension of the San Bernardino Freeway busway west across the Los Angeles River. This project, designed to bring buses and car pools using the busways directly into the downtown area, has been in the planning stage for several years.

Aside from these uses, as well as projected improvements for increased Amtrak rail commuter service, the Southern California Rapid Transit District is planning to run its Wilshire rail line through the terminal in a subway and to increase bus service to the station on the busway extension and the 22 local lines that already serve the facility.

Trailways, (formerly Continental Trailways) an intercity bus line, moved its operations to Union Station a few days ago. The facility also has a waiting area for up to 20 taxicabs and loading space for tour buses.

The station always has had what transportation experts refer to as an intermodal capability. It has been used by different travel modes, primarily trains.

But times change. The trains, of course, are expected to play a bigger role in the station's transformation into a transportation center. But the projects that probably will make the new center workable are the four parts of the region's transportation program—the subway, the downtown people mover, a greatly expanded busway/transit way and a larger, improved bus system.

Union Station fits into each project's plans. Furthermore, different agencies—Caltrans, the city's Community Redevelopment Agency and the RTD—are responsible for each element of the program.

"Without state ownership each agency will have to individually negotiate with the (Union Station) company for their required property rights," the Caltrans report notes.

"Experience has shown that right-of-way negotiations with railroad companies are long, difficult and very costly both in purchase and negotiation costs . . . This approach would be fragmented ownerships and overlapping easements."

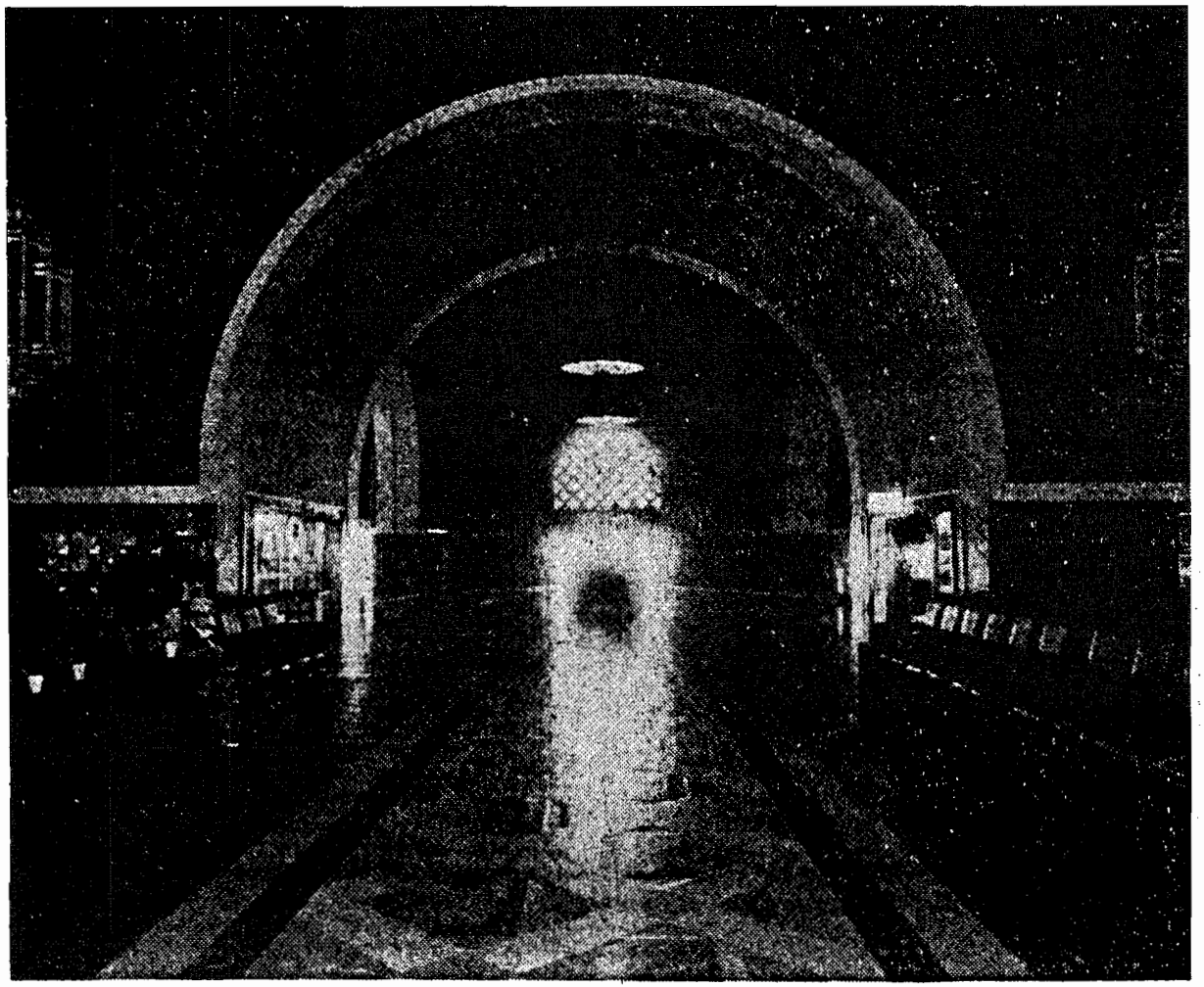
Simply put, Baxter believes the railroads would be reluctant to sell the station "piecemeal." But with Caltrans taking the lead, the report says, the acquisition could be carried out at a more acceptable pace.

Apparently financing is not a problem. The Caltrans report lists at least eight sources of federal and state funds which could be tapped to acquire and restore the sprawling facility.

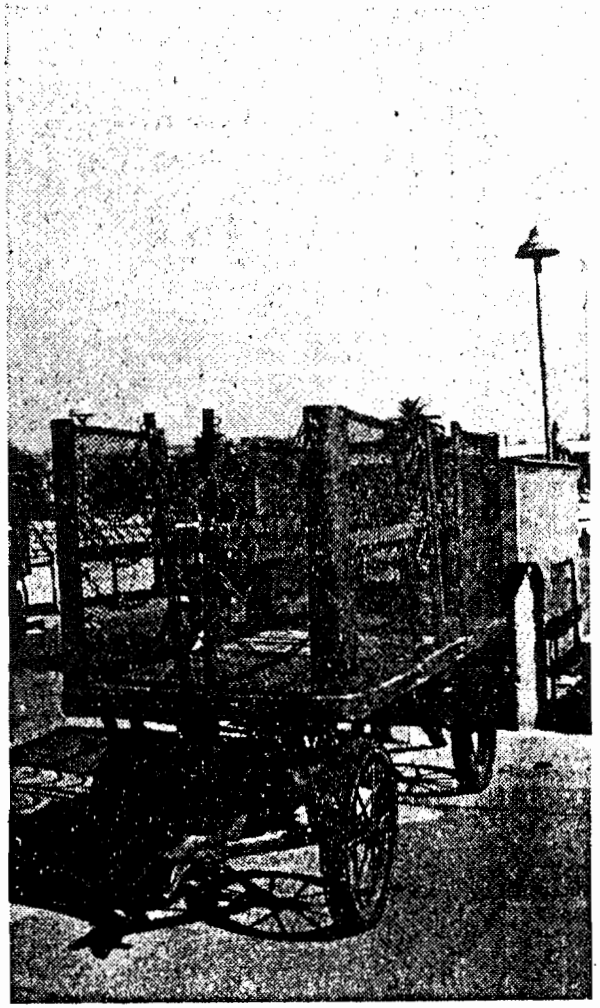
They include, for example, funds made available through recent state legislation, such as a $21 million kitty which can go toward rail terminal improvements, and state and federal highway funds allowable for transit-related highway facilities.

The funds are controlled by various agencies and their approvals would be required.

"Caltrans is committed to the project," Ms. Gianturco says. "We've made our decision but we're not the only decision-maker. My feeling is that once you make up your mind about something, move ahead—acquire the station—as rapidly as possible."



HEYDAY GONE—Handsome monument to the past, station is still in sound shape, Caltrans officials say, but needs crowds of people flowing through its arched and marbled halls to revive its glory days.



IDLE CARTS—Caltrans hopes carts will be in action again if it succeeds in acquiring the historic facility.

Times photos by Ben Olender

THE LOS ANGELES CONSERVANCY

August, 1979

Mr. Bob Pfister
Terminal Superintendent
Los Angeles Union Passenger Terminal
800 N. Alameda Street
Los Angeles, CA 90012

Dear Mr. Pfister:

We were pleased to learn that Union Station has been endorsed by the State Landmarks Commission as a potential National Landmark. We are concerned that deterioration of the property during the past few months may adversely affect the value of the station when CALTRANS proceeds with acquisition plans announced by Ms. Gianturco during the recent 40th Anniversary festivities.

Part of the value of this property is the degree to which it has survived intact as an integral facility. The original landscape architecture of Tommy Tomson figures prominently among the reasons for designation of the entire facility as a landmark.

We are disturbed at the current condition of the Magnolias at the outer extensions of the pedestrian approaches. Several are near death. Other trees along the Alameda Street frontage are also dead or dying from lack of water.

Replacement of these mature specimens for maintenance of scale and continuity of design will be extremely expensive and further depreciate the purchase or condemnation value of the property by thousands of dollars. Short term maintenance at this point could earn several times that amount in the near future.

We urge you to restore adequate maintenance procedures before any additional losses occur. Please feel free to contact us if we can be of any assistance in salvaging or replacing these important landscape elements. We feel that Union Station is too valuable an asset to sacrifice at this late date. Restoration is imminent, and short term maintenance can certainly be cost justified.

Sincerely,

David Cameron
Los Angeles Conservancy

cc: Art Lloyd, Regional Director, Public Relations AMTRAK
Adriana Gianturco, Director, CA Dept. of Transportation

849 South Broadway, Suite 1225 Los Angeles California 90014. Telephone 213/623 CITY

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR NPS USE ONLY
RECEIVED [redacted] Aug. 27, 19
DATE ENTERED NOV 13 1981

SEE INSTRUCTIONS IN *HOW TO COMPLETE NATIONAL REGISTER FORMS*
TYPE ALL ENTRIES -- COMPLETE APPLICABLE SECTIONS

1 NAME

HISTORIC: Los Angeles Union Passenger Terminal

AND/OR COMMON: Los Angeles Union Station

2 LOCATION

STREET & NUMBER: 800 North Alameda Street

__NOT FOR PUBLICATION

CITY, TOWN: Los Angeles __ VICINITY OF

CONGRESSIONAL DISTRICT: 25th

STATE: California CODE: 06 COUNTY: Los Angeles CODE: 037

3 CLASSIFICATION

CATEGORY	OWNERSHIP	STATUS	PRESENT USE	
__DISTRICT	__PUBLIC	X OCCUPIED	__AGRICULTURE	__MUSEUM
X BUILDING(S)	X PRIVATE	__UNOCCUPIED	__COMMERCIAL	__PARK
__STRUCTURE	__BOTH	__WORK IN PROGRESS	__EDUCATIONAL	__PRIVATE RE
__SITE	PUBLIC ACQUISITION	ACCESSIBLE	__ENTERTAINMENT	__RELIGIOUS
__OBJECT	__IN PROCESS	__YES: RESTRICTED	__GOVERNMENT	__SCIENTIFIC
	X BEING CONSIDERED	X YES: UNRESTRICTED	__INDUSTRIAL	X TRANSPOR
		__NO	__MILITARY	__OTHER:

4 OWNER OF PROPERTY

NAME: Southern Pacific, Santa Fe, Union Pacific

STREET & NUMBER: 800 North Alameda Street

CITY, TOWN: Los Angeles __ VICINITY OF STATE: California 90012

5 LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.: Los Angeles County Hall of Records

STREET & NUMBER: 300 West Temple Street

CITY, TOWN: Los Angeles STATE: California 90012

6 REPRESENTATION IN EXISTING SURVEYS

TITLE: Historical Monument No. 101

DATE: August 2, 1973 __FEDERAL __STATE __COUNTY X LOCAL

DEPOSITORY FOR SURVEY RECORDS: Cultural Heritage Board, Room 1500, City Hall

CITY, TOWN: Los Angeles STATE: California 90012

7 DESCRIPTION

CONDITION		CHECK ONE	CHECK ONE
_EXCELLENT	_DETERIORATED	X UNALTERED	X ORIGINAL SITE
X GOOD	_RUINS	_ALTERED	_MOVED DATE_____
_FAIR	_UNEXPOSED		

DESCRIBE THE PRESENT AND ORIGINAL (IF KNOWN) PHYSICAL APPEARANCE

The main portion of the Los Angeles Union Station extends 850 feet alor Alameda Street in a north-south direction, and consists of a series of tile-roofed rooms and arcades in varying proportions. The larger and taller of these are near the center, the others tapering down toward the two ends. Perpendicular to and easterly of the main mass, are a waiting room and an arcade, also tile roofed, plus a wall, which together with the adjoining north-south oriented service area form an "H".

The reddish brown of the Mission tile roofs is complemented by the cream color of the outside walls and the terra cotta-colored dado which is all around the main building. In contrast to the general horizontality is the clock tower, which rises to 125 feet and stands near the main entrance.

The archway over the main entrance and the adjoining tower give one a slight feeling of entering a California Spanish mission. As you pass this entrance, you enter a huge foyer, square in plan and flanked on all four sides by broad arches.

This great foyer opens to the north and to the east upon impressive halls with finely decorated beamed ceilings. Below are floors paved with red quarry tile plus broad multicolored swaths with geometric patterns created with marble from Vermont and Tennessee, as well as from Belgium, France and Spain, combined with Montana Traventine. These swaths, suggestive of immense carpets, run the legth of the two main halls and converge into a square-shaped pattern in the middle of the entrance foyer, Belgian black marble, ceramic tile and traventine form the border on the walls. Doors and windows are bronze.

The upper walls and the ceiling panels of the main rooms are covered with acoustic tile. The acoustics are superb throughout.

The north hall is used for ticketing and waiting. It measures 80 x 140 feet and has a ceiling 50 feet high. The east hall is the main waiting room It measures 90 x 150 feet, has a 40 foot ceiling, and is flanked on the nort and south sides by spacious patios which feature plants typical of Southern California and have benches that provide additional seating for waiting.

South of the entrance foyer is an open arcade whose arches echo the one which flank the foyer. This arcade is used as an additional entrance and exit and provides a view of the south patio from the front of the station. The floor of the arcade is red quarry tile as is the floor of the former Fred Harvey Restaurant with which it connects to the south

The restaurant is approximately 70 x 100 with a 30 foot ceiling. On th wainscot and around the doors and windows is the same colored tile as is found in the rest of the building. On one side of the restaurant is a red tile stairway with a wrought iron railing that leads to a mezzanine above th kitchen area.

At the north and south ends of the front part of the station are arcade that extend toward the adjoining streets and provide protection from the ele-

UNITED STATES DEPARTMENT OF THE INTERIOR
HERITAGE CONSERVATION AND RECREATION SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

ments to those arriving or departing by public transportation. These tile-roo low-rise extensions have a scale approaching that of a residence and contribut greatly to the charm of the building.

Just east of the main waiting room is a spacious corridor in which the su materials of the floors and walls in the main halls are continued. Surroundin corridor on the other three sides are service facilities which extend under so the track area. The tracks are reached by way of a tunnel that is at the same as the station and which acts as a spine to a series of ramps that go up to th raised track level.

The massing and general proportions of the main station buildings, the Mi tile roofs, the archways, the patios, all reflect a strong California Spanish Colonial influence. However, the detailing is a blending of 1930's Art Deco a Spanish, in some instances the former being stronger than the latter, as is th case with the light fixtures and furnishings.

The overall style of the station could be called "composite transitional" was this quality which for several decades made the station look very up-to-da while at the same time having strong links to the past.

The basic California Spanish Colonial theme was selected for the specific pose of having the station blend with the El Pueblo de Los Angeles, the Birthp of the City, which is just across Alameda Street (and is already in the Nation Register of Historic Places).

There has been no major remodeling since the station was built. Cleaning painting are the main things that are needed to make it look like the original

The boundaries described in this nomination and shown in the submitted ma are the original boundaries of the Station. Additional property was later pur by the railroads along the eastern fringe, giving the Station frontage on four streets.

Structures and areas, other than those previously described, consist of following:

1. The service areas just east of and on a similar level as the main Station two sections. On the north side is the baggage-handling area which has co walls and floors. A reduced portion of this area is still being used for gage handling. On the south side is a mechanical equipment room and an are formerly used as a freight depot by the now defunct Pacific Electric Inter Railway. This area also has concrete walls and floors and portions of it being used for storage not related to the Station.

UNITED STATES DEPARTMENT OF THE INTERIOR
HERITAGE CONSERVATION AND RECREATION SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

2. In the upper level, above the service areas just described is a truck-heig concrete platform, 60 feet wide and 800 feet long, roofed over by a steel type roof. The platform is open on the east side and flanked by a row of dustrial-type overhead doors along the west side. At each end of the plat is a two-story, flat-roofed office building of concrete construction, of n particular style but painted the same color as the main station building. two small office buildings and the platform were formerly used by the Rail Express Agency when it was in operation.
3. Also in the upper level and over the pedestrian islands between the railro tracks, are Y-shaped sheds consisting of corrugated-iron panels supported steel columns, both of which are badly rusted and in need of cleaning and ting. These sheds provide protection from the sun and the rain and are ex ted to continue to be needed as long as the tracks are used for passenger trains.

The facilities above described have no special aesthetic value and are hi ical only to the extent that they served a utilitarian function as a part of t overall station, when it was in full operation. However, their location is su that any new development that takes place in their vicinity needs to be carefu designed so as to blend with the significant portion of the station, both aest cally and functionally. That is the main reason why they have been included i nomination.

SIGNIFICANCE

PERIOD	AREAS OF SIGNIFICANCE -- CHECK AND JUSTIFY BELOW			
_PREHISTORIC	_ARCHEOLOGY-PREHISTORIC	XCOMMUNITY PLANNING	_LANDSCAPE ARCHITECTURE	_RELIGION
_1400-1499	_ARCHEOLOGY-HISTORIC	_CONSERVATION	_LAW	_SCIENCE
_1500-1599	_AGRICULTURE	_ECONOMICS	_LITERATURE	_SCULPTURE
_1600-1699	XARCHITECTURE	_EDUCATION	_MILITARY	_SOCIAL/HUMANITAR
_1700-1799	_ART	_ENGINEERING	_MUSIC	_THEATER
_1800-1899	_COMMERCE	_EXPLORATION/SETTLEMENT	_PHILOSOPHY	XTRANSPORTATION
X1900-	_COMMUNICATIONS	_INDUSTRY	_POLITICS/GOVERNMENT	_OTHER (SPECIFY)
		_INVENTION		

SPECIFIC DATES 1936 - 1939 BUILDER/ARCHITECT John & Donald B. Parkinson, A

STATEMENT OF SIGNIFICANCE

The Los Angeles Union Station is a very handsome landmark that is a milest in architectural history and in the history of transportation in America. Alth less than 50 years of age, the property is on exceptional importance. Built wh railroad passenger service was on the decline, it was the last of the great pas senger service was on the decline, it was the last of the great passenger termi to be built in a monumental scale in a major American city. Because of this, p its impressive appearance, it has been called "The Grand Finale of the Golden A Railroads in America." It combined three major railroad systems into one termi in the heart of the city, using a stub-end track arrangement. Architecturally, building is one of the finest expressions of the 1930's styling in this country skillfully combines Streamlined Moderne with Spanish Colonial Revival to create expression which is two-fold; the sleek, streamlined transportation imagery of Moderne, highly appropriate to a center of railroad transportation, and the his ical imagery of Spanish revival architecutre, a major element of the Southern C ornia cultural landscape. Integrity is almost totally intact, with original de ration, ornamentation, fixtures and furnishings still in place. Architecturall remains one of the great examples of its type and period in this country.

The Los Angeles Union Station is probably the only major station in the Sp style ever built in America, as well as the only major station in which landsca was an important and integral part of the original design. What makes it so ou standing is that both of these were done so well as to lead many to believe tha is the most handsome railroad station ever built.

The main reason why the Spanish style was chosen was to have the station b with the El Pueblo de Los Angeles across Alameda Street to the west. The Termi Annex Post Office, which flanks the station on the north, was built almost conc rently with it, has a similar architectural style, and provides a harmonious ba drop to many views of the station from the south, looking north. These three mutually-complementing elements constitute a fine example of good community pla

The architects who designed Union Station were very cognizant of the natur the location and its surroundings. No other major station so perfectly reflect climate, geography, and the heritage of the region in which it was built.

The area of the site had been a part of the original Pueblo de Los Angeles The west half later became a part of the first Asian (Chinese) community in Sou California. That community started shortly after the Gold Rush and was strengb by additional settlers in the later 1860's when the first rail line in Southern California was built. This line ran from Los Angeles to Wilmington along what now Alameda Street. Most of the laborers who built the line were Chinese.

UNITED STATES DEPARTMENT OF THE INTERIOR
HERITAGE CONSERVATION AND RECREATION SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

The first railroad station in Los Angeles (1869) was located near the south corner of the present Station site. This first station was used by newly arrived Anglo settlers who had traveled on sailing ships and came ashore at Wilmington. was also used by Chinese laborers who lived in the nearby vicinity of the statio and worked on farms served by the new rail line. The building of this rail line station stimulated the construction of the Pico House Hotel facing the Old Plaza, also in 1869.

In 1876, Southern Pacific completed the first major rail line to come to Los Angeles. This new line ran along Alameda Street in front of the present Station joined the Wilmington line in the vicinity of the original Station. The Wilmingt line soon became a part of Southern Pacific and a new Southern Pacific Station wa built a few blocks to the north. A few years later, when the Santa Fe and Union Pacific came to Los Angeles, they each built their own stations.

The construction of the present Station marked the end of a 30 year legal ba whereby the City of Los Angeles sought to force the three railroads serving the C to build one Union Station. Prior to 1939, Passenger trains ran along the middle some of the City's most important streets, interfering with traffic and causing numerous accidents.

A Union Station, in the same vicinity as the present one, was first proposed in 1922 by the Allied Architects' Plan for the Los Angeles Civic Center. In ther Chinatown had to be relocated to North Broadway and was named New Chinatown.

The completion of the present Station, plus the Terminal Annex Post Office immediately to the north, were considered very major achievements in urban develo ment and transportation at the time and both played an important role in the logi tics of World War II, particularly the later phase which was centered in the Pacific.

During the period of its peak use, during World War II and the years immedia following, the present Station had 30 scheduled trains coming in and 30 going out for a total of 60. However, during this period a great majority of these trains had two "sections" meaning two separate, complete trains operating on the same schedule, for a grand total of more than 100 trains every 24 hours. These figure were obtained from the Superintendent of the Station.

As the metropolitan freeway network gradually took shape, once again Union Station found itself in the middle of the hub of the latest ground transportatio system. A number of recent studies have indicated that the most logical place t locate a very modern Multi-Modal Transportation Center is where the proposed El Monte Busway extension would converge with the existing railroad tracks that ser Union Station. Plans are proceeding on that basis and include a possible subway and an elevated "people mover."

UNITED STATES DEPARTMENT OF THE INTERIOR
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Thus, the immediate vicinity of Union Station, not only has been the vorte of the area's gradually evolving land transportation system throughout most of City's history, but is expected to continue that role far into the foreseeable future.

9 MAJOR BIBLIOGRAPHICAL REFERENCES

1. California Arts and Architecture - June 1939
2. Los Angeles Cultural Heritage Board - Designation 101
3. L.A. Union Passenger Terminal -
4. (Owners of the property)

10 GEOGRAPHICAL DATA

ACREAGE OF NOMINATED PROPERTY 41 UTM NOT VERIFIED

QUADRANGLE NAME Los Angeles, California QUADRANGLE SCALE 1:24000

UTM REFERENCES

	ZONE	EASTING	NORTHING		ZONE	EASTING	NORTHING
A	11	383220	3768600	B	11	385850	3768680
C	11	385920	3769060	D	11	386150	3768980
E	11	386200	3769110	F	11	386140	3769140
G	11	386260	3769260	H	11	386300	3769220

VERBAL BOUNDARY DESCRIPTION

(See Continuation Sheet)

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE	CODE	COUNTY	CODE
STATE	CODE	COUNTY	CODE

11 FORM PREPARED BY

NAME / TITLE: Ruben Lovret, City Planner

ORGANIZATION: Los Angeles City Planning Department

DATE: August, 1978

STREET & NUMBER: Room 605, City Hall

TELEPHONE: (213) 485-3744

CITY OR TOWN: Los Angeles,

STATE: California

12 STATE HISTORIC PRESERVATION OFFICER CERTIFICATION

THE EVALUATED SIGNIFICANCE OF THIS PROPERTY WITHIN THE STATE IS:

NATIONAL X STATE ___ LOCAL ___

As the designated State Historic Preservation Officer for the National Historic Preservation Act of 1966 (Public Law 89-665) hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to tl criteria and procedures set forth by the National Park Service.

STATE HISTORIC PRESERVATION OFFICER SIGNATURE Kenneth M Ellson

TITLE

DATE 8/22/79

FOR NPS USE ONLY

I HEREBY CERTIFY THAT THIS PROPERTY IS INCLUDED IN THE NATIONAL REGISTER

DATE

KEEPER OF THE NATIONAL REGISTER

ATTEST:

DATE

CHIEF OF REGISTRATION

GPO 9

UNITED STATES DEPARTMENT OF THE INTERIOR
HERITAGE CONSERVATION AND RECREATION SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

FOR HCRS USE ONLY
RECEIVED [illegible]
DATE ENTERED

The nominated property is bounded on the west by Alameda Street, on the e by a line 1200 feet from and parallel to Alameda Street, on the south by the Arcadia Street off-ramp of the Santa Ana Freeway, and on the north by Macy Str except for a portion where the track area extends northerly in an irregular shape bounded on the north by Vignes Street.

Form No. 10-300a
(Rev. 10-74)

UNITED STATES DEPARTMENT OF THE INTERIOR
NATIONAL PARK SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

Los Angeles Union Passenger Terminal

(ADDENDUM) (Original nomination)

CONTINUATION SHEET ITEM NUMBER PAGE

The boundaries described in this nomination and shown in the submi maps are the original boundaries of the Station. Additional prope was later purchased by the railroads along the eastern fringe, giv the Station frontage on four streets.

The area of the site had been a part of the original Pueblo de Los Angeles. The west half later became a part of the first Asian (Ch community in southern California. That community started shortly the Gold Rush and was strengthened by additional settlers in the l 1860's when the first rail line in southern California was built. line ran from Los Angeles to Wilmington along what is now Alameda S Most of the laborers who built the line were Chinese.

The first railroad station in Los Angeles (1869) was located near southwest corner of the present Station site. This first station used by new Anglo settlers who had traveled on sailing ships and c ashore at Wilmington. It was also used by Chinese laborers who li in the nearby vicinity of the station and worked on farms served b new rail line.

In 1876, Southern Pacific completed the first major rail line to c to Los Angeles. This new line ran along Alameda Street in front o present Station and joined the Wilmington line in the vicinity of original Station. The Wilmington line soon became a part of South Pacific and a new S. P. Station was built a few blocks to the nort A few years later, when the Santa Fe and Union Pacific came to Los Angeles, they each built their own stations.

The construction of the present Station marked the end of a lengthy legal battle whereby the City of Los Angeles sought to force the t railroads serving the City to build one Union Station. Prior to 1 passenger trains ran along the middle of some of the City's most i portant streets, interfering with traffic and causing numerous acc dents.

A Union Station, in the same vicinity as the present one, was firs proposed in 1922 by the Allied Architects' Plan for the Los Angele Civic Center. In 1933, when the present Station site was cleared, major portion of the then Chinatown had to be relocated to north B way and was named New Chinatown.

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During the period of its peak use, during World War II and the years immediately following, the present Station had 30 scheduled trains coming in and 30 going out, for a total of 60. However, during this period a great majority of these trains had two "sections", meaning two separate, complete trains operating on the same schedule, for a grand total of more than 100 trains every 24 hours. These figures w obtained from the Superintendent of the Station.

As the metropolitan freeway network gradually took shape, once again Union Station found itself in the middle of the hub of the latest ground transportation system. A number of recent studies have indicated that the most logical place to locate a very modern Multi-Moda Transportation Center is where the proposed El Monte Busway extensio would converge with the existing railroad tracks that serve Union Station. Plans are proceeding on that basis and include a possible subway and "people mover".

Thus, the immediate vicinity of Union Station, not only has been the vortex of the area's gradually evolving land transportation system throughout most of the City's history, but is expected to continue that role far into the foreseeable future.

The Los Angeles Union Station is a very handsome landmark that is a milestone in architectural history and in the history of transportat in America.

UNITED STATES DEPARTMENT OF THE INTERIOR
HERITAGE CONSERVATION AND RECREATION SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

LOS ANGELES UNION PASSENGER TERMINAL, LOS ANGELES COUNTY, CALIFORNIA

Supplemental Information

The Los Angeles Union Passenger Terminal is significant for its role in the history of transportation in the city of Los Angeles and the United States. Its integrated design combined the passenger and express operations of three separate railroad companies into a single new terminal complex on a short dead-end track. The final product resulted from more than 20 years of litigation between the city, state, and the railroad companies. Prior to the construction of the unified terminal complex, Southern Pacific, the Atchison, Topeka, and Santa Fe, and the Los Angeles and Salt Lake (later the Union Pacific) owned their own depots at three different locations east of the central city, although Southern Pacific and Union Pacific later shared a single depot in the decade prior to the construction of LAUPT. Some of the trains were carried to their respective terminals through city streets at grade, creating a dangerous situation as automobile traffic increased. The incoming lines of the three companies were in relatively close proximity; the combination of the three into a single terminal appeared relatively easy. However, the railroad companies were opposed to attempts to combine their operations in a single terminal. Numerous legal battles finally culminated in the 1931 court decision which resulted in the construction of the new union terminal at a site immediately east of the Los Angeles Plaza. The type of terminal layout then became a major point of litigation, resulting in additional delays. Santa Fe favored a through terminal; the Union Station plan, however, was to create a stub-end terminal with all three lines consolidated on a short, dead-end trackage system. The operational disadvantages of utilizing this type of system was a major objection of the railroad companies. The stub-end system created an end-of-the-line station with the tracks ending at bumpers; it had been used in the construction of most of the major urban passenger terminals in the United States during the 19th and early 20th centuries. The LAUPT plan placed the main passenger terminal building at the side of the stub-end track network, with a series of ramps and an underground passage connecting the platforms with the waiting room.

The site selected for the new LAUPT complex was that of the old Chinatown area immediately east of the Los Angeles Plaza. The city favored this location, bringing the combined rail network into the center of the city near the civic center. Construction of the complex began in 1934 after the clearance of much of the old Chinatown. The first phase involved the construction of a large earth platform on the eastern portion of the property, elevating the track area 12 feet above Macy Street on the north and 16 feet above Aliso Street on the south. The ramps and pedestrian subway connection to the site of the main terminal building were also constructed in this early phase. However, a dispute over the proposed location of an adjacent postal facility caused further delay of the construction of the main terminal building. The Los Angeles Union Passenger Terminal finally opened on May 7, 1939.

UNITED STATES DEPARTMENT OF THE INTERIOR
HERITAGE CONSERVATION AND RECREATION SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

LOS ANGELES UNION PASSENGER TERMINAL, LOS ANGELES COUNTY, CALIFORNIA

The LAUPT complex was the last major railroad terminal to be built in the United States. The complex is an integrated system of considerable architectural and historical merit resulting from years of effort to create a consolidated passenger terminal. The three major railroad lines were brought together over a set of throat tracks, with a carefully designed arrangement of turn-outs, cross-overs and double slip switches which permitted trains of each company to be routed to any track in the station at any time. The trains were shunted onto 16 tracks. Eight double ramps lead from the platforms to a subterranean tunnel which leads to the main waiting room. In addition, six tracks were constructed exclusively for express and baggage service. The terminal integrated passenger, baggage and express services to a high degree. Parcels and baggage were processed for transcontinental shipment in the support facilities immediately behind the main terminal building. Express parcels were brought in by truck to Railway Express loading docks on the second level. In addition, Pacific Electric Railway's freight box motor fleet utilized a part of the southern portion of the terminal property. A small freight service yard connected directly with the Railway Express building. Pacific Electric collected freight and parcels throughout the Los Angeles Basin, and centralized them at LAUPT for shipment throughout the United States; most passenger trains included a number of express and baggage cars.

The main architectural focus of the complex is the passenger station itself. The support facilities for baggage and parcel shipment immediately behind it are more utilitarian in appearance. The terminal complex is bordered by retaining walls on the north and south sides which reflect the Art Deco influences in the 1930's design. At the east end of the complex a large berm forms the border. The 500-foot pedestrian subway connects the main terminal building with the tracks; it is integrated structurally and visually into the design, using linear bands of subdued colors to unite the two areas. Colors chosen are those traditionally associated with the Southwestern deserts, including earth tone reds, oranges, yellows, and browns. Light fixtures of the 1930's period are placed in the ceiling leading to the eight sets of double ramps rising to the platforms between the tracks; the platforms are surmounted by the original butterfly sheds.

The Los Angeles Union Passenger Terminal was the destination and point of origin of a number of the country's most famous transcontinental trains of the period including Santa Fe's "El Capitan," "Super Chief," and "California Limited," Union Pacific's crack streamliner "City of Los Angeles" and the "California Limited," and Southern Pacific's "Golden State." Although built when rail passenger service was declining, the terminal saw a resurgence of rail travel during the Second World War. With the competition from the newly

UNITED STATES DEPARTMENT OF THE INTERIOR
HERITAGE CONSERVATION AND RECREATION SERVICE

NATIONAL REGISTER OF HISTORIC PLACES INVENTORY -- NOMINATION FORM

LOS ANGELES UNION PASSENGER TERMINAL, LOS ANGELES COUNTY, CALIFORNIA

developed Los Angeles International Airport in the 1950's, rail passenger service at LAUPT began a steady decline. The number of trains was reduced over the years. Today, LAUPT continues to function under the operation of Amtrak with several transcontinental trains operating from the station and six trains daily to San Diego. At present, the California Department of Transportation plans to increase passenger rail service in the Los Angeles-San Diego corridor; ridership on this route has increased substantially over the last several years.

The LAUPT complex retains a very high degree of its original design integrity as an integrated unit. The major alteration has been the removal of the former Pacific Electric Freight service yard at the south end of the complex and its replacement by an addition to the Railway Express Agency offices in the 1950's. The new addition was built in a style which repeated that of the earlier retaining wall at the ground level; the second level was built as a covered freight platform. This addition is not significant historically or architecturally to the LAUPT complex.

In summary, the Los Angeles Union Passenger Terminal complex is significant in the history of transportation in Los Angeles, the state, and the nation. Its integrated design reflects the historical evolution through years of litigation to consolidate three major railroads into a single terminal complex. In addition the main passenger terminal building remains one of the great architectural statements of its time. With its high overall integrity, the Los Angeles Union Passenger Terminal complex still remains the "Last of the Great Stations."

SOURCES:

Bill Bradley, The Last of the Great Stations: 40 Years of the Los Angeles Union Passenger Terminal, Interurbans Special 72, Interurbans Publications, Glendale, California, 1979. 110 pp.

John A. Droege, Passenger Terminals and Trains, Kalmbach Publishing Company, Milwaukee, Wisconsin, 1969. 410 pp.

S. V. Meigs, "The Union Passenger Terminal, Los Angeles, California," unpublished manuscript, c. 1934. 30 pp.


POST OFFICE
UNION STATION
1250'-0"
500'-0"
1020'-0"
1200'-0"
LOS ANGELES UNION STATION

the visible past

text and photographs by walter houk

2

It's a monumental structure, but the Union
senger Terminal is in scale with its surrounc
It was designed to blend with the period-
buildings at the Old Plaza across Alameda S
and gets along with them very well. The de
simplified Spanish style, while a link to the pa
practically undated despite the station's 40t
niversary earlier this year.

On July 6 the State Historical Resources
mission will meet in Los Angeles to consider
ing the Union Passenger Terminal on the Na
Register of Historic Places. This agency i
channel for all California applications for the
tional Register, a status that qualifies buildin
protection and often for federal funds. The t
nal is already designated Historic-Cultural
ument No. 101 of the City of Los Angeles.

The occasion is a good time to take stock
terminal, also known as Union Station, espe
now that its halls are again becoming lively
the movement of rail passengers. Complet
1939 after six years of building at a cost o
million, it was the last great rail station b
America.

As principal gateway to the city, it was int
to introduce the arriving traveler to the Cali
good life. This accounts for the spacious hall
lofty 50-foot ceilings, a graceful clock towe
roofs, arcades and two generous patios fille
trees and shrubs. The inclusion of landscap
the building design was radical for that era.

The mission allusion was dominant, bu
1930s' present showed in Moderne detailing,
was by then an established architectural i
Bronze door and window designs, light fix
furnishings and signs show curiously unmi
modernity, although they are never in conflic
the totality.

Finishing materials were first class and wa
feeling. They included a bright ceramic tile
scot for a travertine wall, tile floors and rer
able swaths of inlaid colored stone that stre
like carpet runners down the centers of the

The building was also innovative technically
new material was acoustical tile, used on wal
ceilings to absorb the reverberations that on
flicted large hard-walled public spaces. The
was superb acoustics.

An advanced system moved trains in ar
and loaded passengers on and off at 16
with great efficiency. Even when World War I
fic peaked at 100 trains a day and crowds
memorable, there was little sense of conge
And the post office erected as part of th
complex just north across Macy Street also
tioned smoothly.

Union Passenger Terminal was built by the
railroads serving Los Angeles: Southern P
Santa Fe and Union Pacific. Their architects
Gilman, J. H. Christie and R. J. Wirth, get m
the credit, although the design is usually attr
to consulting architects John and Donald B.
inson, who also did Bullocks Wilshire, the Co
and other Los Angeles buildings. What is ex
dinary is the unity and quality of design prc
by such a committee effort.

The 44-acre site is included in the Na
Register application. That is important be
such well-located open land is always cove
potential builders. The latest is an agenc
wants space for a major parking structure.

The 40th anniversary occasioned publica
an excellent picture book, *The Last of the
Stations*, by Bill Bradley (Interurbans: $
Available at bookstores and at the station,
handsome presentation of the building's
ground, construction, inaugural festivities, it
trains and its Amtrak present.

nain entrance to Union
on is under the marquee
a tile-lined archway. The
wer rises 125 feet. In the
und are a sundial and
ith indirect lighting fix-
ery modern in 1939.

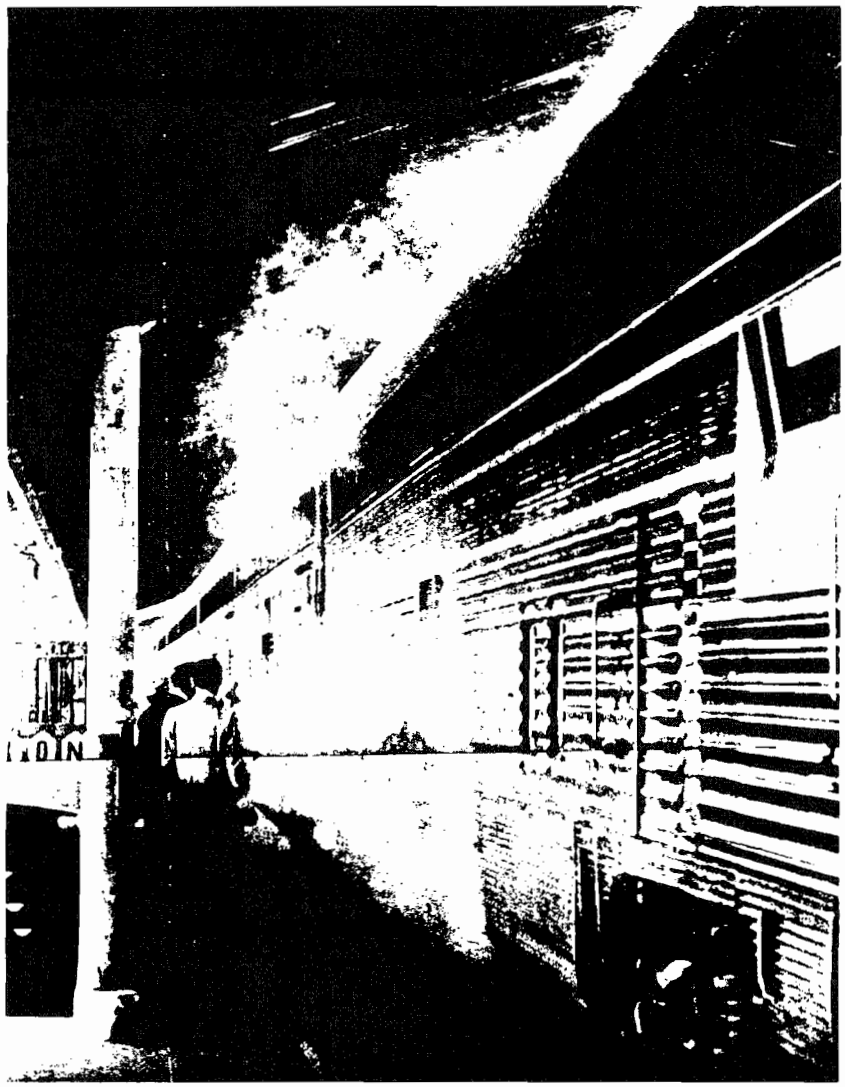
lofty north hall has a
ete-beamed ceiling, tall
indows, large-scale
light fixtures and walls
tical tile. Ticket count-
ce used by three rail-
are of walnut, and the
r boasts a central swath
lored stone inlay.

Eight passenger-load-
ing ramps, which are
by tunnel from the cen-
ion area, are sheltered
ilevered steel butterfly
s. They provide access
acks and to today's Am-
rs. At right, one of the
porary "iron horses"
steams forth, just as they did in the old days.

5 The open-air south arcade, in the foreground, is juat as imposing in height as the entrance foyer to which doors lead beyond the glass wall. Poured concrete construction permitted tall wide-span arches.

6 A shell-like arch top is an abstract reference to the Moorish component of the station's Spanish Colonial design theme. The colorful ceramic tile wainscot is a more direct allusion, and both of these traditional elements are compatible with Moderne detailing.

7 This view looks out from the foyer to the south arcade (see photograph 5). To the left is a tree-shaded patio that greets incoming travelers; beyond is space that once housed a bar and restaurant.



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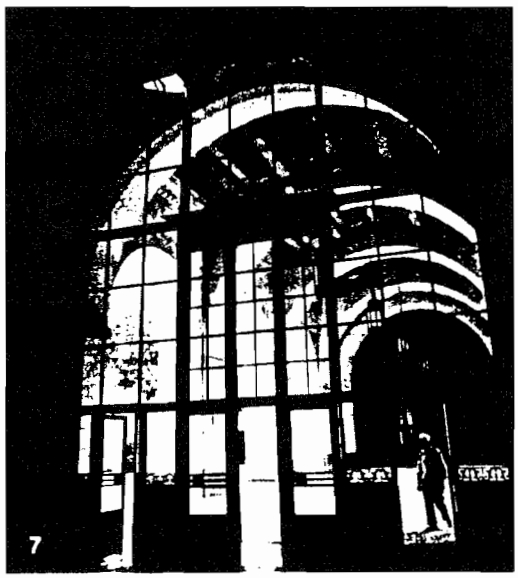


7

letters

our visible past

It is with pride that I read your article on the Los Angeles Union Station *(The Visible Past, June 24)*. It was my father Jan G. van der Linden who, as one of the several architects employed by the railroads for this great project, had many of his design concepts chosen. Each of the architects was asked to submit ideas for motifs.

My father labored long and hard making hundreds of drawings (some of which I still have). He was overjoyed as he came home to his family daily to report on the progress of the station and his recommendations for the mission styling that was approved by the head architects.

Born and educated in Holland, my father was a licensed California architect. He was a highly skilled artisan and he loved the beautiful Colonial Spanish architecture of the California missions. The lines of the main facade and the detail work of the archways and Moorish ornar tion employed throughout tl Angeles Terminal are a re: his creative talent.

My father was but one of among the unsung heroes depression years who work the planning and building "jewel of Los Angeles," the Station. His name is not c cornerstone of the building, rings through the rafters main concourse and ec throughout every archway, and window.

Francis C. van der L
Los Ala

some words about beer

As importers of fine pre beers, we are most gratifie the excellent article and cov given to beers in your Ju issue *(The Great Beer Myst*

As usual, Robert Lawrence zer did a superlative job of cating the consumer to the points of beer and brewing.

John L. Ma
Wisdom Import Sales Co

As a world-traveled conno of beer for nearly 50 years, dorse your judges' high rat Anchor Steam beer *(A Tas*

In 1939, the year of Union Station's triumphant opening celebration in Los Angeles, there were inauspicious events simultaneously afoot in New York. While Cecil B. DeMille and the Native Daughters of the American West paid a choreographed homage to the history of trains with traditional marching bands and floats, the futuristic New York World's Fair of 1939 was projecting doom for the trains and the train stations, announcing the demise of standard mass transportation.

The Fair's prediction of glorious freeway travel and interstate flight came true enough to eventually empty Union Station of the grateful crowds. However, the station has survived so tenaciously that it can now enjoy the completion of a full cycle of history. Mass transit promises to return to the city that learned to resist it best. And Union Station is destined to be reequipped for the practical future, to serve as a model center for all modes of public surface travel – just as it did 40 years ago. More trains, more public buses and commercial buses, proposals for a new subway and a very new people mover will recognize Union Station as the portal of an expanding downtown.

Union Station was the last of the large urban stations. Its first proposals preceded the actual construction by 20 years and its functional eclipse followed another 20 years later. In 1959, the Boeing 707 introduced Los Angeles to a new era in which the accessibility of long distance destinations was exceeded only by the inaccessibility of the plane stations. The new airports, sited in industrial wastelands, were indistinguishable from the warehouses nearby.

The nobler halls of Union Station were left without even the commuter patronage that postponed the decay of Eastern stations, for they depended on transcontinental traffic. However, through its design (and the fact of its siting on the periphery of expensive real estate) Union Station could deny its own death pronouncement.

The stuff of its sturdy architecture retained dignity even without the presence of the daily 15,000 visitors that it was capable of handling, and minus their accompanying revenue for maintenance. But suddenly the crisis of gas has crowded the San Diego corridor and decorated the station with seasonal crushes of travelers. Architecture hobbyists come to inspect the Art Deco details. And finally, the theme of the opening day parade, "The History of Transportation," is revived by plans shared by Caltrans, the Community Redevelopment Agency, the Southern California Rapid Transit District and Amtrak to transform the station into a center of transit connections.

Modest Monumentality

Union Station was a triumph of architecture by committee, the product of a multi-venture of architects and consultants working for three unwilling clients. The Southern Pacific, Union Station and Santa Fe railroads had to succumb to the city's vision for a single uplifting and space-saving gateway to replace the three existing stations. Architects J.H. Christie, R.W. Wirth and H.L. Gilman, representing the train companies, supervised the work of the principal firm, John and Donald Parkinson. The chief designer named within that office was architect Edward Warren Hoak, a Pasadenan with the nation's best obtainable Beaux-Arts education, that of the University of Pennsylvania.

Long before the Parkinson contract, the early ideas about an eventual union of stations described a Beaux-Arts classical building that would package most of the functions into a single volume in the tradition of Grand Central Station, "one of the grandest spaces the early twentieth century ever enclosed," according to Henry-Russell Hitchcock. However, the architects chose not to compete with such volumetric bravura, designing in the Spanish Colonial style with linked pieces of great halls, rooms, arcades, and gardens that make a more modest impression of having grown incrementally.

The massing of the terminal and the casual manner of connections invents an informality never associated with great urban depots. Architecturally, the station soothes the traveler where he would expect to be overwhelmed. It celebrates his *marche* away from the main halls and through the parking lot using arcades that line the 800-foot Alameda Street facade. The transport itinerary is completed by buses (once trolleys) and taxis that stop at opposite ends of the arcades where they meet the city streets.

Unlike the plebian bulk of public buildings, and most notably different than the airports to follow, Union Station took on the responsibility of fulfilling its program rather than simply housing it. It made grandeur comfortable, sparing neither beauty nor accommodation in the process. And most remarkably, it provided a tender lesson in native living, an introduction to the pleasurable contradictions of Southern California for the huddled masses arriving barely thawed from Grand Central.

The fresh arrival would find himself deposited in a microcosm of local flora, shaded by eucalyptus, palm, rubber, pepper, orange, and olive trees. Passing from loggia to loggia, he would find the Fred Harvey Restaurant and a length of arcades leading to more transport. The outward bound, traveling with less leisure, would enter the ticket concourse under an aggressive series of timber trusses, then proceed to the waiting room through a single colossal arch. The waiting benches, facing the north and south gardens, improved upon the monastic norm with a modernized design of upholstered walnut.

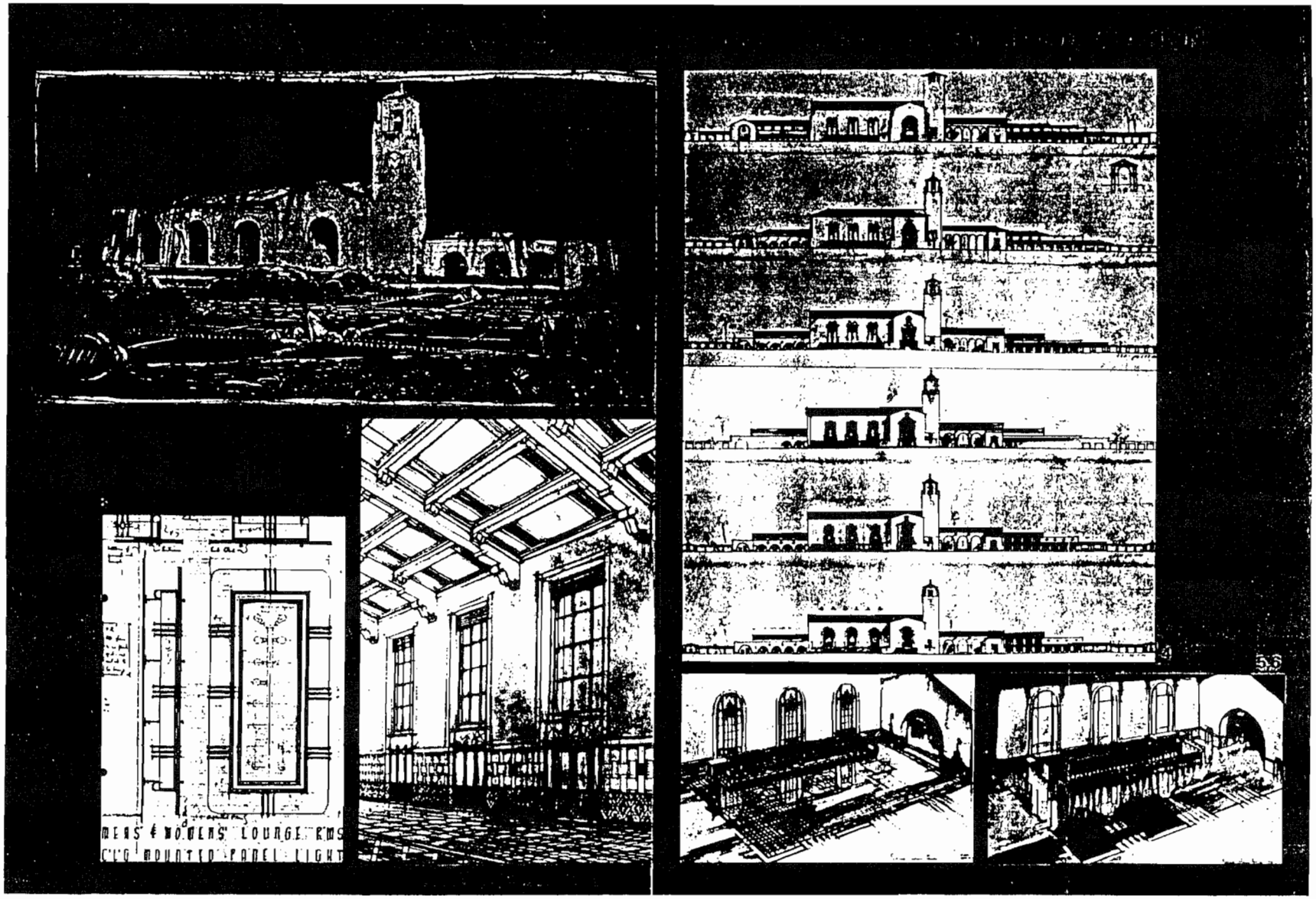
A somber baronial emptiness reigns over the two main public halls, the ticket concourse and the waiting room even when they are adequately peopled. In the distance between the dramatic roof structure and the intricately patterned floors and wainscoting, the walls are surfaced with austere expanses of acoustical tile that create a conspicuous silence. It is that vacant distance between the small and the large scales that allow the station its special claim to a reassuring monumentality.

Sincere Dissimulation

Because Los Angeles characteristically considers imitation and dissimulation to be praiseworthy fruits of the imagination, Union Station also, is not what it seems. The design of the station provides instruction in the nature of the artificial since the new arrival would soon have to take initiation to the Angeleno practice of entering unnatural endeavors in direct competition with natural wonders.

The trees in the garden are real; the timber trusses in the ticket concourse and the girders and joists in the waiting room are less than real. The heroic feat of spanning each room's 80-foot width in wood is accomplished by the use of simulation. The "wood" is a sculpted envelope of painted plaster that hides the fact of the steel frame.

The roof structure is not immediately suspect for its trickery when inspected



from the floor 60 feet below. But while the giant trusses and joists make a first impression of familiarity, they form a second and simultaneous signal of impossibility since the span is too great and the construction date too late for a likely use of wood. The ceiling too, is false. Visible vents of the patterned ceiling above the roof structure screen the heating and cooling ducts that force

Served with an architectural requirement for 42" walls, the engineers camoflaged the building's steel structure with two 8" walls of concrete. At the points where the steel columns meet the roof structure, the full depth is filled. In between, the hollow spaces contain return air ducts. If the station is restrained in its intepretation of Spanish Colonial details, it is flamboyant in the

Signals in the Details

New dignity has been laid on the station with the discovery that Moderne details were superimposed over the antique entirety of the Spanish design. Variations of either style had appeared in earlier and purer forms throughout the 1920s, but the combination of Art Deco and Spanish Colonial was unexpected even within the checkered

smaller scale are Deco: signage, furniture, neon-light fixtures and zig-zag flooring. The Spanish Colonial identifies the place, invites the traveler into the gardens to wait and relax, and lends a sense of established well-being to the halls. But it is the Deco elements that orient him with more determination of speed and purpose to the equally Moderne trains waiting outside. Radio

Montana Travertine and two other marbles set on a base of black Belgian marble. Each hall is striped with a single marble path that provides a fast directional surface through the quarry tile flooring. The waiting room marble with its jazz pattern of triangular inlays of Verde Antique and Alicante marbles points directly to the trains. But the ticket concourse path leads to an aggrandized drinking fountain set in a 40'-high niche, the focal point of the hall and another kind of oasis greeting to the traveler. Water closets on either side of the fountain are treated with proper processional flourish.

Edward Warren Hoak, AIA

Union Station was the proudest work of an architect trained in the expectation that architecture included attention to all surfaces of a building. But as that attention grew more costly and became less desirable as a commodity in the '40s and '50s, Edward Warren Hoak left the Parkinson office to protect his private notion of quality for 12 years more, in independent practice. Then, Hoak retired from design to spend his last 20 working years realizing atomic test structures for the engineering firm Holmes and Narver.

Although Hoak's public relations resume there ignored his contribution to Union Station, his drawings, recently acquired by the Huntington Library in San Marino, testify to his authorship.

Under the tutelage of Paul Cret at Penn, Hoak was a contemporary of Louis Kahn, solving pompous Beaux-Arts programs with the requisite water-color tableaux. Those early drawings, though exquisitely inked, concealed the spontaneous rendering style that Hoak would later unleash for the Union Station commission. His preference for exaggerated views in charcoal lines recall Sant'Elia's train stations.

Soon after an awarded tour of Europe and graduation in 1928, Hoak returned to California to lend his command of world architecture to large buildings for the Parkinson firm. Hoak earned the opportunity for the Union Station commission through his design work on the USC gymnasium and the Title Guarantee and Trust Building in Los Angeles, both of 1930.

Hoak's devotion to the details of Union Station is thorough. Adjusting his rendering style to the spirit of the task, Hoak was as capable of describing Moderne light fixtures with exacting charcoal on legal pads (to be transposed to the working drawings) as designing full-scale Spanish Colonial grilles in sweeps of charcoal on linen.

The Next Era

Hibernation now comes gracefully to Union Station. The ticket agents, once the focus of the great ticket concourse, now occupy but a corner of the expanse of walnut ticket booths. The restaurant and cocktail lounge have been sealed and preserved since 1967, opening only for rare private parties. The neon Western Union signs have been extinguished. But the gardens have continued to flourish independently of ticket sales, and the thin patina of wear only enhances the character of the station.

Assessors have inspected the station property to put a price on that character. Union Station has sustained itself just long enough to enjoy a timely combination of events that promise to keep it from the fate of either Cincinnati's Union Station, distant from the city core and empty of use, or that of Union Station in Washington D.C. where enthusiastic remodelling efforts have gutted the building.

Proposals for the station are advancing from all sectors of the city. Entrepreneurial interests have envisioned supper clubs, boutiques, and legitimate theatres filling the various halls and summoning the tourists from Olvera Street. Academics would rather celebrate the station's siting on the original Los Angeles pueblo in a more instructive way, as a Hispanic-American cultural museum or a photographic center documenting the city's history. City agencies are designing the Union Station into their plans for increased transit service within the city and improved commuter connections to those lines.

None of the volunteered uses require the entire 40 acres of station property and few can justify the $12 to $18 million assessed purchase price for their individual projects. Fortunately Caltrans is committed to acquiring the property to house the multifarious functions under a single ownership. Thus the Caltrans title will not only protect the station from a splintering of intentions and parcels, but it will also facilitate streamlined application for state and federal funds for renovation and reuse.

The original purpose of Union Station will be enhanced. It may be a gateway to the inner city instead of the entry to all of California, but at least the trains will prevail. And the station will assume a new role as it becomes a commuter terminus serving, at last, the type of passenger that has kept all the other urban terminals alive. Amtrak and Caltrans will cooperate in sending commuters into Union Station in trains, new busways and buses.

The most controversial plans fix Union Station as the terminus for the proposed people mover, the system designed to ease city traffic by guiding commuters downtown on aerial buses from parking points at the periphery. The Community Redevelopment Agency had to choose between renovating Union Station for reuse or building anew. They concluded that the new accommodations would destroy the record of the station's original use. Parking for 2,000 cars, waiting and ticketing area for extended suburban bus lines and current city lines and maintenance space for the people mover will occupy a new structure on abandoned track area.

Comparison between the two adjacent buildings may prove to be grim. One will emerge amid apologies and defenses, produced for citizens panicked about the prospect of housing and transporting themselves in greater concentrations and wary of all personal compromises towards that future. The other building was designed to extol those concentrations. It was created by the confident optimism of an age that built in a grand tradition for the approval of the future. Union Station, nearly dismissed by an era of autonomous transport, continues to amplify the meaning of arrival and departure.

Barbara Flanagan

Barbara Flanagan is an architectural designer who first saw Los Angeles through the Vista-Dome of a SuperChief bound for Union Station.

DRAWING KEY

1. *Charcoal rendering of final design.* **2.** *Study for waiting room.* **3.** *Instructions for working drawings of light fixture, charcoal on legal pad.* **4.** *1936 studies for main elevation.* **5, 6.** *Charcoal studies of ticket concourse.*

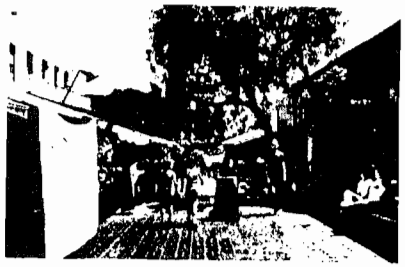
Edward Warren Hoak's drawings of Union Station belong to a recent donation of the architect's records to the architectural archives, established one year ago, at the Huntington Library in San Marino. The archives are curated by Alan Jutzi and overseen by an advisory committee of university and professional group representatives under the direction of Stefanos Polyzoides.

of restrained Classical elements and ample money, but the great acclaim of the hotel was based on its widely advertised gas lighting fixtures and two zinc bathtubs.

At the north end of the plaza is the entrance to Olvera Street (1 H), the city's oldest theme shopping mall. Unlike Chinatown or Little Tokyo, Olvera Street is an entertainment center more than an ethnic neighborhood. This tiny pedestrian way, paved with Spanish tiles and brick, has over seventy businesses lining it. Rustic brick-and-adobe buildings are packed together, with porches and outdoor cafés arranged in festal emulation of a Mexican border town. Often their floor levels are not the same as the street's, so special flights of stairs and diagonal views lead up and down into colorful shops. Open-air stands selling Mexican candy, taquitos, ceramics, postcards and huaraches fill the center of the street, in the dappled shade of canvas awnings, palms and ancient olive trees.

At 14 Olvera Street is the Avila Adobe (1 I) (ca. 1818), the oldest house in Los Angeles, now a museum. It meets the street with a heavy beamed porch covered in grapevines. In back, the house wraps around a dusty Early California courtyard with a few fruit trees and cactus along the edges. A little farther down Olvera Street is a fountain and a triple row of bricks, which is all that remains of the Zanja Madre (the Mother Ditch) (1 J), the water course that brought water from the Los Angeles River to the pueblo between 1781 and 1863.

Like the rest of the public realm in Los Angeles, the Old Plaza is exotic, charming and hopelessly inadequate. It is odd that the center of one of the world's great cities should be occupied by a South of the Border tourist trap, but it's a charming little tourist trap and a useful reminder that the tiny pueblo once served by a single ditch lies not much more than a century behind the bumptious metropolis.



1 1 H · *Olvera Street*

1 1 I · *Avila Adobe*

1 2 · UNION STATION

800 North Alameda Street

John and Donald B. Parkinson; J. H. Christie, H. L. Gilman, R. J. Wirth, architects; Herman Sachs, color consultant; Tommy Tomson, landscape architect, 1934–1939

Union Station, in its heyday, was the western end of the line for rail passengers from all over the North American continent. Its architectural style, restrained

1 2 · *Union Station*

1 3 · *New Chinatown*

Spanish Colonial Revival with Streamline Moderne touches, has soaked up the romance of the ranchos and beamed back a vigorous assertion of the city's modernity. In true California style, indoors and outdoors are artfully interwoven in the design. The shadows of slender Mexican fan palms caress the huge white walls, while tall and glassy arched openings allow shafts of sunlight to slip through the lofty interiors. A giant-size freestanding arcade connects the main concourse to the restaurant, encouraging travelers to enjoy the California climate en route. Behind the main concourse the high-ceilinged waiting room is filled with light from flanking courtyards. The northern court contains California live oaks and jacarandas, the remains of a fountain, and beautiful tiled benches. Over the north wall loom the domes of the post office next door. The southern courtyard was originally planted to be the quintessence of Southern Californian garden design. Landscaped with now-enormous fig trees and Mexican fan palms, birds-of-paradise, ginger and orchid trumpet vines, the garden was meant to provide a fragrant haven for travelers already intoxicated with the thrill of having arrived in Eden, or despondent over oncoming exile.

The detail is as sophisticated and sure as the spaces. Interior colors are muted earth tones; the walls are warm gray concrete block. Small openings are accented by white shell-like moldings that slither around the edges. At the east end of the waiting room, thick columns sport a wainscoting of colorful ceramic tiles patterned like Navajo rugs; the pattern changes its scale as it slips down onto the ceramic tiled floor. The presence of most of the original furnishings keeps alive the building's exuberance. Heavy wood chairs in the waiting room offer comfort and privacy from the crowds that are no longer there. Glass-backed Art Deco signs still provide elegant directions. An original drinking fountain in the main concourse sums up the verve and careful opulence of the whole place: its basin is Z-shaped, cut into a single block of dark marble with a font at each end of the Z, the drain in the middle. The near-desertion of the station now puts a nostalgic golden patina of time and shifting fortunes over a still modern masterpiece.

In the 1930s, Streamline Moderne, the "smart" style, swept the nation; every-

licitous uses of the style were the aerodynamic trains of Norman Bel Geddes and Raymond Loewy. These sleek, powerful vehicles streaking across the American landscape captured the imagination of the nation. Architects, engaged to design new train stations, were quick to employ Streamline Moderne, echoing the lines of the trains, though the traditional railroad station in Southern California was still designed in Mission, Spanish, Pueblo or Churrigueresque style.

The Streamline Moderne, like its Hispanic predecessors, did not eschew ornament, unlike the International Style that began in the same era: witness the dazzling semi-Navajo chromed interior of the Super Chief club car, or the parallel Navajoid manifestations on the walls of Union Station. This is a remarkable building, at once chic Moderne, regional southwestern (as befitted arrival at the end of the line) and radiant Spanish Colonial Revival; it is a triumph that transcends but never avoids style.

I 3 · NEW CHINATOWN

Bounded approximately by North Alameda, Ord, Yale and Bernard streets; main activity is between the 700 and 1000 of North Broadway, ca. 1930 and after

New Chinatown, moved when Union Station was constructed, is both a tourist spot and a working community. Its center covers two blocks of picturesquely disposed pedestrian streets that run between two-story buildings with suitably Oriental motifs grafted onto surfaces of beige, green or salmon stucco trimmed in red, aqua or gold wood and tiles. Roof lines are accented with tiny lights, neon strips or scampering dragons. Octagonal windows, moongates, curved roof lines and continuous balconies spice up the shops and restaurants.

The highest concentration of Chinese ornament appears along Gin Ling Way, a pedestrian street between Broadway and Hill Street, about halfway between College and Bernard streets. Behind elaborate gateways, tiny streets amble past buildings that seem almost to founder beneath intricate masses of brightly colored tiles and carved wood and overhanging upturned roofs—even the phone booths have become vermilion pagodas. Near the middle, across from Sincere Imports, is a wishing-well fountain made up of a six-foot-high mountain with small plants and smaller statues within a fish pond. Tiny paths and bridges lead up to figures of the eight Chinese Immortals, with, at the top, the inevitable goddess Kwan Yin protected by blue lions and a shrine. The plaza continues across Hill Street into Chung King Court, where there's another fishpond and a miniature mountain with a Kwan Yin on top, though it's all considerably smaller and tamer than the first.

Most of the newer buildings have joined in the excitement as well: tiled roofs with upturned corners cover an Oriental Union 76 gas station (900 North Hill Street); super-torii Japanicisms envelop a Bank of America (850 North Broadway); Foo dogs and ginkgo trees flank the front door of an East-West Federal Savings (935 North Broadway). The Mandarin plaza (970 North Broadway) contains a particularly traffic-stopping yellow-and-orange pagoda roof at the entrance to its ordinary stucco shops. The cunning fake chinoiserie of it all is in danger of being attacked as blatant racism these days, but its innocence should serve it as a shield.

Bounded approximately by First, Third, South Los Angeles and Alameda streets

California's dismal history of racial oppression didn't stop when the Indians were wiped out. One of its most recent manifestations was after Pearl Harbor, in 1941, when U.S. citizens of Japanese descent were thrown out of their homes (to the enormous profit of real estate speculators) and sent to internment camps inland. Ever since their return at the end of World War II, Little Tokyo has been the cultural center of Los Angeles' Japanese community, one thousand strong. Located in just a few blocks bordering First Street on the eastern edge of the civic center, the area contains over a hundred Japanese American businesses.

First Street is the attractive major commercial strip. Although the two-story buildings have not been flamboyantly Orientalized, the tiny scale of the shops and the delicate merchandise and plastic-food displays in the windows speak of Japan. The area remained unchanged until the recent completion of the New Otani Hotel and Japanese Village Plaza, which have brought in waves of tourists.

The Japanese Village Plaza (between First and Second streets, near Central Avenue) might be seen as just another in an overabundance of theme shopping centers, but in this case the exotic atmosphere is a delight and a success. An open-air, village-scaled pedestrian mall winds through an entire block; on each side are one- and two-story shops with white stucco walls, blue-tiled roofs and exotic details such as round-timber porch columns and wood slat screens recollective of bamboo, all used with just enough restraint. The narrowing and opening out of the walkway provides a rich sequence of spaces and views: a splashing fountain enlivens one jog; a careful composition of natural rocks and ginkgo trees bedecks another; the north end is marked by a tall, heavy-timbered tower with another blue-tiled roof. Village Plaza is a masterly addition to Little Tokyo, very much in the spirit of the place and far more interesting than the New Otani Hotel (120 South Los Angeles Street), which is just another high-rise with a standard collection of pastel-awninged boutiques at its base. But the New Otani does have a pleasant and startlingly sited Japenese garden, complete with rocks and trees and waterfalls, on a third-floor roof terrace.

I 5 · LOS ANGELES CITY HALL

200 North Spring Street

John C. Austin, John and Donald Parkinson and Albert C. Martin, Sr.; Austin Whittlesey, interior, 1926–1928

Every world city is represented to us by an image or landmark, but Los Angeles has been hard pressed to provide just the right one. Some images have blossomed out of almost nothing, like the huge white HOLLYWOOD sign on the side of Mt. Lee in the Hollywood Hills, and some have fallen into neglect, like the Venice canals. Some are ambitious but slightly too silly to succeed, like the theme building at the airport. If there has come to us a single image of L.A., it is doubtless the tower of City Hall, with the world's first four-level freeway interchange nearby, dripping vines like a Piranesi view of ancient Rome.

Since its completion, City Hall (5 A) has been the enthusiastically received

Los Angeles Times

METRO

Sunday, March 1, 1987

IRIS SCHNEIDER / Los Ange

There's not much of a crowd at lunchtime in Union Station, even if you count the pigeons that stroll across its

UNION STATION

Memories of a fading era live on where a sarcastic Ronald Reagan gave an opinion, where John Madden gives directions—and where untidy pigeons leave their mark.

An old Chinese man used to come and sit in the north patio years ago, just kind of stare into space. It turned out he'd been born here—on the property. Before the train station was built, this was part of Chinatown. He said he was born where the coffee shop is now.
—Amtrak stationmaster Les Page

By STEVE HARVEY,
Times Staff Writer

There is a haunting quality to Union Station. The high ceilings are a part of it, as well as the vast halls with their many empty chairs and closed ticket booths, and the silence.

It's so quiet that often the flapping wings of the resident pigeons can be heard on their hopeful sorties through the coffee shop.

Much of the interior, from the black walnut beams and the 3,000-pound chandeliers down to the marble mosaic walkway in the waiting room, remains remarkably intact after almost half a century.

"You can almost sense the presence of all the politicians and movie stars who've walked through here," said CBS broadcaster and aerophobe John Madden, who says he rides 100,000 miles of rails some years.

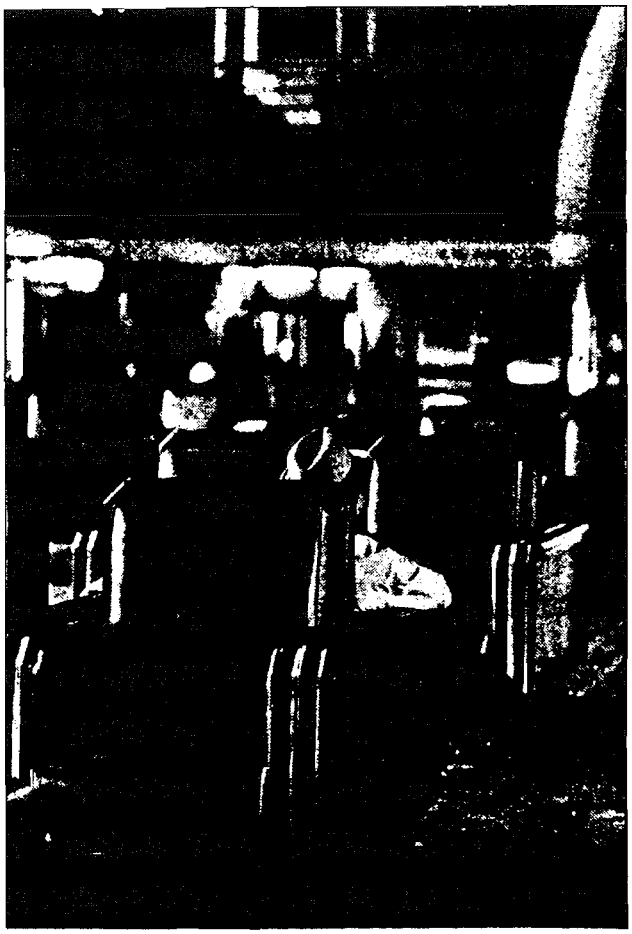
The station's dim lighting adds to the B-mystery-movie atmosphere. Not long ago, in fact, a ticket clerk recognized an escaped felon on the FBI's Ten Most Wanted list—the FBI furnishes the station with photos—and the fugitive was arrested as he tried to board a train.

A few days later, recalled Jack Kinney, an Amtrak employee, "a guy came in off the street, kind of a funny look in his eye, and said, 'I understand one of your ticket clerks turned in a guy. Which one of you was was it?' It was kind of spooky."

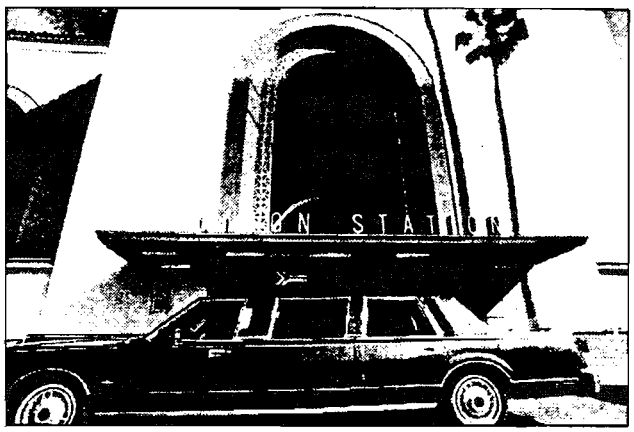
□

Transit projects seem to generate controversy in Los Angeles. Union Station, like the planned Metro Rail, was a project that was debated for years—for almost three decades, in fact.

Originally, the Southern Pacific, Union Pacific and Atchison, Topeka & Santa Fe railroads had separate stations. In 1915, the city of Los Angeles proposed a new terminal for the three (hence the name "union") to upgrade facilities and reduce the number of grade crossings on the streets.



Man in traditionally styled hat fits right into old-fashioned interior; limo parked outside conjures up image of more glamorous days, when station hosted politicians and stars.



After two court defeats, the railroads grudgingly agreed to pay for the construction, which took six years and cost $11 million (the amount currently budgeted for about 1½ miles of track for Metro Rail).

To make room on the 48-acre site a few blocks northeast of City Hall, part of Chinatown was razed. Ironically, it was the Chinese who had built much of the railroad for meager wages.

Critics nicknamed the station's architectural style "mission moderne." The Spanish heritage was evident in its exterior design. Architects H. L. Gilman, J. H. Christie and R. J. Wirth created a Moorish clock tower, high-arched windows and slanted red tile roofs. The influence of consulting architects John and Donald Parkinson was reflected in the many Art Deco touches, such as the pencil Gothic sign work.

A half million people attended opening day ceremonies in 1939, which culminated with a historical parade featuring horsemen, mule-skinners, stagecoaches, horse cars, trolleys and an 1869 locomotive, the Southern Pacific's Collis P. Huntington.

At first, more than 60 trains a day passed through the station. But railroading was already on the decline, and then came jet airliners and superhighways. One of the gloomiest phrases for a train man is "air mail."

The station was down to nine trains a day by 1971 when the government-subsidized National Railroad Passenger Corp. (Amtrak) took over passenger operations at Union Station. The agency leased the facilities from Santa Fe Southern Pacific Corp., which controls 77% of the property through its two railroad subsidiaries, and Union Pacific, which owns the rest.

Rail service has increased somewhat. Union Station, now also a depot for Trailways buses, currently sees 18 trains (and about 7,000 passengers) a day. But the Reagan Administration has talked of eliminating Amtrak's $600 million-plus subsidy, which would likely spell doom for the station.

Maybe it was only a coincidence, but stationmaster Les Page recalls a strained conversation he had with Reagan a quarter century ago.

"A lady needed help with her bags and Reagan was passing by," he said. "He said I should help her. I told him that I was assistant stationmaster and because of union rules I couldn't. I could go get someone but I couldn't help her. He made a smart remark about that's why the railroads were going out of business."

□

Bob Pfister is Union Station's censor.

"One time someone wanted to

Please see STATION, Page 12

STATION: Spooky Relic of a Fading Er

Continued from Page 1

shoot a wacky movie here where the doorman was supposed to be shirtless and the red cap surly," said Pfister, the station manager. "But we made them change that."

"The airport would never have a scene like that," explained Tom Buckley, public relations chief for Santa Fe Southern Pacific.

"The airport" is an inevitable topic of conversation of train people.

Buckley recalled the time he told a producer that the cost of filming a movie at Union Station was $5,000 a day plus insurance requirements and the producer asked how he'd come up with that figure. "I didn't tell him but I'd read in the papers three days before that that's what the airport charges," Buckley said, laughing.

Aside from costs, film companies must also agree to a list of restrictions—no opening the ancient Venetian blinds, for instance.

"We're afraid they'd fall," Pfister admitted.

Lighting can also be a problem because the station is purposely kept somewhat dim so its computers won't overheat.

No matter the cost and red tape, the movie companies keep phoning.

"They've shot so many here I can't keep track of them," Pfister said as he thumbed through a file cabinet full of scripts. " 'True Confessions.' That one with Barbra Streisand in it—yeah, 'The Way We Were.' 'To Live and Die in L.A.' Something called 'The Woo Woo Kid'—I didn't recognize any of the names in that. . . . Years ago there was even one called 'Union Station.' Had a big star . . ."

"William Holden," Buckley said. "It was our 'Airport.' "

□

Even a casual inspection of the freshly painted exterior, shiny brass light fixtures, ornate drinking fountains and high-backed leather chairs reveals why Union Station's been called "The Last of the Great Stations" (the title of its biography by Bill Bradley), why it's an official cultural landmark, why architecture students come to pay tribute, why travelers snap photographs of it and send copies to Pfister's office. Gladden ranks it in a first-place tie (with Chicago's Union Station) among the nation's best.

He even diagrammed some side trips that passengers could take out from the station's waiting room if they have spare time.

"You can cut either to the left or right and find patios," he said. "Or you can go straight up the middle, through the door and across the street to one of the restaurants on Olvera Street."

Actor James Mason used to sleep on the grass in the patios between trips.

For all its obvious beauty, there is another side to Union Station—the closed portions off-limits to the public. Its ghost town.

Pfister and a secretary work in a small office in an otherwise deserted, two-story annex to the station, their door locked to keep out transients.

Scheduled to be demolished to make room for a Metro Rail station, the annex houses old locker rooms and showers (where conductors and porters once washed up), rooms full of discarded equipment with walls bearing old train schedules and floors covered with years-old newspapers.

An empty two-cell jail languishes behind a door marked "Police."

"It was used when law enforcement agencies transported prisoners," said Southern Pacific's Buckley, whose father was a locomotive engineer. "They could leave prisoners in there and go across the street and get a bite. That was before jets came in the late '50s."

On the other side of the station sits the defunct but well-preserved Fred Harvey Restaurant, named for the king of depot diners whose dying words were said to have been: "Tell the boys not to cut the ham so damn thick."

It's a Moorish-influenced wonderland of arched ceilings, leather banquettes, corked walls and multicolored tiles bearing parrots. Its Art Deco cocktail lounge features a copper-sheeted bar, bubble-encased mirrors, red stripes of indirect lighting and black marble sinks in the "Powder Room."

"This place used to really jump," recalled Buckley. "Jurors came here. Soldiers passing through. Movie stars. When Metro Rail comes here, we think people will be pounding on our door to come in and lease it."

While Buckley was talking, someone wandered in.

"Maybe it's Wolfgang Puck," he joked.

But it was a transient.

□

Ticket clerk Jack Kinney, a 30-year veteran and a third-generation railroad man, remembers the days when comic Jackie Gleason used to throw parties for his cast in one of Union Station's offices—"he'd have big tubs of potato salad and cole slaw and other food."

He remembers seeing actor Jimmy Cagney in a white suit and white shoes, and the time he asked newspaper columnist Walter Winchell for some identification before changing a $100 bill and Winchell snapped: "Here's my Mafia card."

The clientele isn't quite so glamorous anymore.

"We got one guy who takes the Desert Wind to Vegas who says he's Howard Hughes," Kinney said. "We always say, 'Have a nice trip, Mr. Hughes.' Another woman claims she's Ronald Reagan's sister."

The pigeons, which seem to use Union Station as their hangar, can be a distraction, too. One of the gray-and-white bombardiers scored a direct hit on Kinney once while he was working. "It was embarrassing because I was getting a customer a ticket," he said. "After I finished with him, I just walked out—just went home and took about three showers."

But, at least, his surroundings endure—the painted ceilings, the bronze-framed doors, the red quarry tile floors.

They were a pleasant surprise for ticket agent Ed Francis, a fourth-generation railroad m who transferred from Springfi Mass., three years ago.

"First time I walked in, my caught the ceiling and I s 'Wow,' " he recalled. "There' warmth here, not like some of stations in the East that have m of a warehouse-type feeling."

There were other surprises, to

"One day I see this attract blonde woman with a low-cut dr and she's carrying several suitc es and got three small kids w her," Francis said. "As she con through the door, one of the k starts to run away. She reaches him and her breasts just pop out her dress. She starts to fix her dr and the kid takes off again. And s says, 'Oh, the hell with it!' grabs t kid and just walks into the stati with her breasts hanging out.

"That's when I knew I was L.A."

LOS ANGELES UNION PASSENGER STATION

by Dan Hoye/Los Angeles Conservancy

THE CONCEPT FOR A UNION STATION:

Union Station is so named because it represents the "union" of more than one railroad in establishing a common shared facility. Across the country, the concept of a "Union Station" was a result of civic improvement programs, such as in Washington D.C. and Los Angeles (where it was first proposed in 1915 and again in 1922).

The traffic congestion on downtown streets caused by trains was one of the reasons why the city and the railroad commission called for grade separation and one consolidated station. Previously, Southern Pacific was at Sixth and Alameda, Santa Fe was at Second Street and Santa Fe Avenue, and Union Pacific was formerly on East First Street.

The organizers of the Union Station project spent more than 20 years in litigation between the city, state, and the railroad companies. A court decision in 1931 finally cleared the way for the "station," which was then designed and built between 1934 and 1939. The planners for the new station eschewed opulence for a more modest and functional tourist center, one that would express the region's more marketable characteristics - including its Spanish heritage, its year-round climate, and above all its relaxed mystique.

LAST OF THE GREAT TRAIN STATIONS:

The irony is that by the time this long-standing dream became a reality, it was 1939, perilously close to when passenger trains would gradually slip away from their former glory. Even then, there were those who speculated that this would be "the last of the great train stations built in the U.S." which in fact proved to be correct.

SITE WAS OLD CHINATOWN:

Union Station was built on the cleared site of Old Chinatown. In spite of some local hostilities, the local Chinese population contributed greatly towards the early development of local rail lines. Chinese labor opened landlocked Los Angeles to the nation with the grading of the Newhall road. Thousands of Chinese dug the difficult San Fernando tunnel to bring the first outside railroad link with the Southern Pacific.

In the 1930s, all of Old Chinatown which stood along the east side of Alameda Street was torn down to make way for Union Station. Many families moved southward towards the produce market area. Some of the Chinese businesses moved nearby to China City, a project bounded by Sunset Blvd. between Spring Street and Main Street. Others who left Old Chinatown went to the 900 block of North Broadway and developed New Chinatown.

ARCHITECTS AND PLANNERS:
The new building was designed by committee: The Consulting Architects, John and Donald Parkinson, worked with three railroad architects: H.L. Gilman, J.H. Christie, and R.J. Wirth. The project's landscape architect was Tommy Tomson while the color consultant was Herman Sachs (best known for his Art Deco porte cochere mural at Bullocks Wilshire.)

Plans at one time were delayed when some called for the new Terminal Annex of the Post Office to be incorporated into the Union Station complex, but this idea was nixed in favor of a separate building across Macy Street.

CONSTRUCTION:
When Mayor Frank Shaw was finally able to allocate a million dollars in civic funds raised from a gasoline tax, the Union Station project began to make headway. 400,000 cubic yards of earth were moved in order to raise the tracks 12 feet over Macy Street and 16 feet over Aliso Street. Construction of the main building cost $4 1/2 million. The steel reinforced concrete structure was financed in part by Southern Pacific (who paid 44%), Santa Fe (who paid 33%), and Union Pacific (who paid 23%).

ARCHITECTURE - EXTERIOR:
From the outside, the building's appearance suggests an early California Mission with its clock tower, Moorish finial, high arched windows, slanted red tile roofs, and patios. A series of arcades connect the station with low-rise buildings on either side, the whole complex set 200 feet back from the street. In front of the main entrance is a small sunken rose garden with a Moderne-style black marble sundial and Moderne light posts.

ARCHITECTURE - INTERIOR:
While the exterior is charmingly romantic, the interior was created as an up-to-date facility. Because of the influence of the Parkinson's, many features are strongly redolent of 1930s Art Deco, complete with touches of streamlining. Note the original leather-upholstered settees, Venetian blinds, strip panel lighting, and evocative pencil Gothic lettering for much of the signage. As a result, Union Station is one of the nation's few buildings to successfully combine the Spanish Colonial Revival with the Streamline Moderne style.

MAIN ENTRANCE:
The main entrance arch has an extended metal marquee topped by stand-up lettering. The 50-foot-high arch is rimmed with colorful tile work, and within the arch is a panel of patterned concrete and glass. One enters on axis between the ticket booths to the left, the restaurant wing to the right, and the waiting room and trainsheds straight ahead.

TICKET CONCOURSE:

The largest room is the ticket concourse where Spanish Colonial decor is most fully expressed. Lofty and ornate walnut beamed ceilings support 3000-pound circular chandeliers. Tall arched windows are faced with lacy iron grillwork. The 115-foot-long ticket counter is original and is made of American black walnut wood.

Beyond the restrooms at the north end of the concourse, there was once a barber shop. On the southern end, there was a telephone room with its own switchboard - this area has been remolded as the security offices today. Still present are several small door openings accented by white scalloped shell moldings.

WAITING ROOM:

The upper walls and ceilings of the station's larger rooms are faced with several varieties of acoustical tile, including ground-up corn cobs which help trap bouncing sound. The use of acoustical tile for the reduction of "station echo" was something of a novelty back then. Tile wainscoting, a thin strip of Belgium black marble and travertine add color to the lower walls. Red quarry tile covers most of the floors, except around the edges and down the center, where different strains of marble lie in a pattern suggesting a carpet runner.

Outside light is filtered through the tall windows, which are fitted with amber cathedral glass and Venetian blinds. Night illumination comes from the impressive Spanish-style chandeliers (10 feet in diameter) which hang suspended from the ceiling. Bronze-framed doors lead to the two garden patios on either side of the main waiting area. These patios were seen as an introduction to our beautiful climate and indoor/outdoor lifestyle. The northern patio has tiled benches and a fountain along with plantings of California live oaks and jacaranda trees. The southern patio has enormous fig trees, Mexican fan palms, birds-of-paradise (the official city flower), ginger and orchid trumpet vines.

TRAIN RAMPS:

At the end of the station near the train ramps, the decor shifts markedly to a more functional streamlined style - panels of florescent lighting, stylized columns with gently flaring capitals, and brilliantly tiled drinking fountains with an almost Navajo or Native-American Southwest Indian look. The passenger tunnel leads to 8 ramps and 16 tracks. The loading platforms still have their original butterfly canopies overhead.

OPENING DAY FESTIVITIES:

On May 7th, 1939, Union Station was finally opened to the public after several days of ceremonies and pageantry. From Wednesday, May 3, to Friday, May 5, Los Angeles staged one of the biggest extravaganzas in its history to celebrate the station's opening. There was a parade of floats down Alameda Street attended by half a million people, formal dedication ceremonies hosted by film star Leo Carillo, tours of the new station, and lots of live entertainment. The building was "dedicated to the spirit of private enterprise and the continuing growth of Southern California."

A show entitled "Romance of the Rails" was presented several times daily in a specially constructed 6000-seat amphitheater on the station's tracks. Through narration, music from a men's chorus of railroad workers, and elaborate staging, the show depicted the history of Southern California and its development through transportation. From Promontory Point in Utah to the arrival in Los Angeles of the Southern Pacific in 1876 to the introduction of horse drawn streetcars, the show covered them all. Hugh modern locomotives, brightly decked out in striped bunting, were paraded past the crowds.

HISTORY OF USE:

The new station started modestly after its opening. For the first three years of its operation, Union Station served some 7,000 passengers daily and maintained a staff of 325, not counting railroad ticket sellers or employees of Railway Express and the Pullman Company. An average day saw 33 arrivals and 33 departures into the station - this was to be the norm for the next 20 years.

During World War II, over 100 trains a day ached to carry the loads of uniformed veterans. Trains were SRO - standing room only. After the war, business returned to normal. In 1948, some 66 trains were still going in and out daily. However, the city of Los Angeles then began to spend large sums of public money to improve Mines Air Field in Inglewood. Eventually, it would become Los Angeles International Airport. Airlines moved their flights there from regional airports such as Glendale and El Monte.

The daily number of rail departures from Union Station dropped by two starting in 1953, with two more lines dropped the next year. By the late 1960s, there were only 15 lines in and out. Amtrack, the National Railroad Passenger Corporation, began operating to create a more positive attitude towards passenger train travel which continues today.

Currently, big plans call for a multi-million development of the Union Station property. Some envision the historic buildings as a regional transportation center surrounded by highrises. The city and private developers continue to review their options.

RESTAURANT

The once bustling Fred Harvey Restaurant, part of the famous chain of railroad depot eateries, is located in the south end of the station. It was designed by noted architect Mary Colter, who is best known for creating many buildings in the Grand Canyon area such as Hopi House and the Desert Watchtower.

The Harvey House Restaurant at Union Station shows a Moorish influence with a scale more intimate than the station's larger rooms. The arched ceilings still maintain their original metal chandeliers. Cream-colored walls surround tiled wall panels decorated with parrots, and a brightly patterned floor of red, black, and buff cement tile. In the center of the room is the free-standing U-shaped stainless steel lunch counter which seats 27. The booths, including those elevated along the walls, could seat 260. Multi-course meals were served on real china set on linen tablecloths.

There was also an adjacent Art Deco cocktail lounge with a copper sheathed bar, bubble encased mirrors, red strips of indirect lighting, and black marble sinks in the "Powder Room." Frosted glass panels with champagne bubbles and grapes can still be seen around the entrance.

UST:X5

Tommy Tomson, A.S.L.A.

Tommy Tomson was a prominent landscape architect in Southern California during the 1930's and 40's, yet little documentation remains today on either the man or his work. Two projects which received wide acclaim and were attributed to him are the Los Angeles' Union Station and the Santa Anita Raceway. His other work included private gardens for prominent Hollywood movie actors and an office building for Myron Seznick in Beverly Hills.

The south patio at Union Station was designed to advertise the glory of Southern California. As passengers arrived by train they were guided out of the station through the patio which was planted with lush vegetation, olive, pepper, and palm trees. This experience provided visitors with a vivid and memorable entrance to the City.

It is believed that Tomson received no formal schooling but acquired experience through work with local nurseries. He became registered with the American Society of Landscape Architects in 1934 and was listed as residing in Pacific Palisades. For a few years in the mid-thirties he lived and worked in Portland, Oregon, later returning to Southern California. He also kept a house in Palm Desert for which he designed the landscaping.

References

Journals:

- "The Professional Landscape Architect", by Tommy Tomson, California Arts & Architecture, Vol. 55, April 1939, pp. 14-15, 35-36.

- "Office Building for Myron Selznick", California Arts & Architecture, Vol. 57, June 1939, pp. 28-29.

- Landscape Architecture, Jan. 1939, pp. 53-57.

- California Arts and Architecture, Vol. 56, Aug. 1939, pp. 22-23.

- Architecture Forum, Vol. 72, May 1940, pp. 358-59.

Books:

Vaughan, Thomas, ed. and Farriday, Virginia Guest, Assoc. ed., Space, Style and Structure: Building in Northwest America, Oregon Historical Society, Portland, Oregon 1971.

UST:X32

V. CONSTRUCTION FILE DOCUMENTS

A. INDEX
B. LANDSCAPING
C. LIGHTING
D. SIGNAGE
E. FRED HARVEY FACILITIES
F. CEILING STENCILS

A. INDEX

NUMERICAL INDEX TO CONSTRUCTION FILES - LAUPT

File No.	
1	Engineering (Excluding Personnel) - General, Surveying, Architectural Alterations to Architectural Office at 331 Aliso Weekly Reports of Progress of Arch. Bureau
1-1	Engineering - Architecture, Coordination
1-2	" - Blue Print Orders from Santa Fe
1-3	" Construction Office at 726 No. Alameda St. Alterations to building Mail Service Miscellaneous Matters re. constrn. office
1-4	Minutes of Meetings of Architects Subcommittee
1-5	Original Minutes of Various Committee Meetings
2-1	Application for Franchise
2-2	Purchase of Private Lands for Right of Way ✓
2-3	Disposition of Existing Improvements Bills of Sale Sale of Buildings Removal of Trackage - Date St., Etc.
2-4	Taxes During Construction of Land & Improvements
2-5	Acquisition of Public Lands Street Vacations Franchises Purchase of S. P. Co. Lands

DWG No. 50

File No.	
2-5-1	Street Opening and Widening Opening New Lyon Street Extension of Bauchet Street Widening Clara Street Vignes Street Extension (For easement over R/W see File 15-2)
2-6	Income Properties Rentals; reduction of rentals Repairs Notices to Vacate Vacancies
2-7	Right of Way Area Computations
2-8	Papers covering Trail Balances covering Land Costs
3-	Grading - General
3-1	Clearing Terminal Site & Approaches Demolition of Structures Sale and removal of brick
3-2	Aliso Street Retaining Wall
3-3	Terminal Yard Drainage
3-4	Retaining Walls - Miscellaneous
4	Bills Payable & Vouchers - Ganeral Correspondence, Instructions etc.
5	Bills Collectible - General Correspondence, Instructions, etc.
6	Bridges, Trestles and Culverts - General U. P. Connection Bridge over L. A. River S. P. Connection Bridge over L. A. River
7	Construction Estimates & Costs
8	Operation Estimates - Station Servicing, Switching, etc.
9	Development of General Track Plan
10	Trackage, Joint - General Track Details Frogs Switches Bumpers Crossings
10-A	Working detail of charges for material used in construction of LAUPT trackage - S.P. Continuity Track and that portion of S.P. continuity track within Terminal limits, owned 50% by S.P. Co. and 50% by LAUPT.

File No.	
10-1	Trackage, Non-Joint - General
10-2	Track Computations - Joint and Non-Joint
10-3	Work Sheets covering ballast involving accounts 2, 11 & 16
11	Pacific Electric Railway Tracks & Overhead System
12	Los Angeles Railway Tracks and Overhead System
13	Fences - General R/W and Station Fences
14	Public Utilities - General
14-1	Public Utilities Service Connections Rates
15	Grade Crossings and Signs - General
15-1	Macy Street Grade Separation Subway Easement over Right of Way
15-2	Vignes Street Grade Separation Subway
16	Station Buildings - General Soil Tests Building Permit Stresses Test Pits
16 (A)	Station Buildings Tentative Floor Plans Sewer Connections
16 (B)	Station Buildings Exterior Concrete Finish
16-1	Main Station Building (Design)
16-1-1	Clock System
16-1-2	Illumination of Station Buildings (Except Mail, Baggage and Express Units) Interior Lighting Conduits and Wiring in Buildings Lighting Fixtures
16-1-2-1	Signs Property Markers Station Master's Office Terminal Limits Subway Train Gates

16-1-3 Furniture - General

16-1-3-1 Miscellaneous Cabinet Work and Hardware

16-1-4 Signaling System on Platform
Telephones on Passenger Platforms
Push Button System to Towers

16-1-5 Pneumatic Tube System

16-1-6 Heating, Ventilating and Air Conditioning Station Buildings
Cooling Tower

16-1-7 Public Address System and Acoustical Treatment of Station Buildings and Signal Towers Communication System between Terminal, Mission and Dayton Towers.

16-1-8 Pullman Co.

16-2 Mail, Baggage and Express Unit (Design)

16-2-1 Sanitary Facilities in Mail, Baggage and Express Unit
Toilets
Wash and Locker Rooms
Lunch room facilities for baggage men
Piping, Sewer Connections

16-2-2 Illumination of Mail, Baggage and Express Unit (Sec.1 to VII)
Interior Lighting
Conduits and Wiring in Structure
Lighting Fixtures

16-2-3 Equipment in Mail, Baggage and Express Unit
Ice Trucks
Baggage and Mail Trucks and Tractors
Red Cap Carts
Tools, Oil and Gasoline Storage Tanks
Suit Case Racks

Minutes of Meetings of Baggagemen

16-2-4 Scales, Platform

16-2-5 Elevators

16-2-6 Dumb-Waiters

16-2-7 Conveyors - (Baggage Unit Only)

16-3 Sanitary Facilities in Main Station Building
Plumbing Fixtures
Soap Receptacles
Toilets
Towel Containers

16-4 U. S. Working Post Office
Mail Boxes in Buildings

File No.	
16-4-1	Area Computations - Post Office Site
16-5	Dining Room, Restaurant, Kitchen, Cocktail Bar, Kitchen Equipment, Refrigerators, Refrigeration Machinery.
16-6	Outside Lighting Floodlights Driveway Lighting Conduits Lighting Standards Yard Lighting
16-7	Railway Express Agency, Section VII
16-8	Landscaping, Parking and Paving Paving Parking Areas and Thoroughfares
16-8-1	Landscape Architecture
16-9	Passenger Platforms and Butterfly sheds
16-10	Platforms - Loading, Height, etc. Paving - Headend tracks, Platform Drainage (Sewage)
16-11	Passenger Subway and Ramps; also North Ramp (Elevated Driveway and South Ramp " "
16-12	Drinking Fountains
16-13	Communication System Within Station Buildings, including MB&E Unit Telephones and other equipment Telegraph Dept.
16-14	Bids, Main Station Building Correspondence regarding bids Instructions to Bidders Specifications Proposals
16-14-1	Bids, Electrical Work in Main Station Building Correspondence regarding bids Instructions to bidders Specifications Proposals
16-14-2	Bids, Office Furniture in Main Station Building
16-14-3	Bids, Waiting Room Settees in Main Station Building
16-14-4	Unsuccessful Bids under Spec. MS-10 Plumbing
16-14-5	

File No.	
16-14-6	Bids, Fire Alarm System
16-14-7	Proposal for Acoustical Work
16-14-8	Proposal for Pneumatic Tube Communication System
16-14-9	Bids, Cabinet Work - List of Bidders and Correspondence
16-14-10	Proposal for furnishing and Installing 3 Steam Boilers
16-14-11	Bids on Decorating
16-15	Mechanical Building and Facilities Wash and Locker Rooms
16-16	Material and Supply Room Tool Room Carpenter Shop
16-16	Terminal Yard Buildings & Facilities (between Vignes and Bauche streets) Yardmen's Locker Building Section Tool House Water Tank Water Column
16-17	Lockers
17	Clearances
18	Railroad Commission - General
19	City of Los Angeles, Participation in Cost of Terminal
20	City of Los Angeles, Other relations with
20-1	City of Los Angeles, Ordinances
20-2	City of Los Angeles, Special Permits
20-3	City of Los Angeles, Plumbing Installation Permits
20-4	City of Los Angeles, Building Permits
20-5	City of Los Angeles, Electrical Permits
21	Interstate Commerce Commission
21-1	Progress Report of Terminal Construction Forces
21-2	Minutes of Meetings held in connection with Completion Report and Valuation Reports
21-4	Direct Expenditure Reports
21-5	Information Requested by I. C. Examiners

File No.	
21-6	Exceptions and Comments by I.C.C. and Replies by Terminal
22	Publicity, Clippings, etc.
23	Industries affected by Terminal Development & Construction
24	Concessions, General
24-1	Travelers Aid Society
24-2	Fred Harvey
24-3	Los Angeles Transfer Co.
24-4	Yellow Cab Co.
24-5	Circle Auto Parks
25	Interoffice Memoranda - General
25-1	Interoffice Memoranda - (File that was kept on Mr. Barclay's desk)
26	Telegraph and Telephone Lines (Outside) Duct Lines Conduits, including Western Union
26-1	Minutes of Communications Subcommittee Meetings
26-2	Work Sheets covering Telephone & Telegraph Lines & Equipment
27	Signals and Interlockers, General, Terminal Tower
27-1	Minutes of Meetings of Signal Subcommittee
27-2	Mission Tower Interlocking Plant Signals and Interlocking for Terminal Connections at Alhambra Avenue and Los Angeles River
27-3	Working Papers - Final Adjustments for Mission & Terminal Interlocking Plants
28	Applications, Miscellaneous
29	Power Plant Building, General (Design)
29-1	Boiler Plant Equipment Boilers, including settings Fuel oil storage tanks Pipe line, etc. B-C Pipe line for heat, water & Elec. to supply Station Buildings
30	Office Furniture and Equipment Engineering equipment, construction office telephones

File No.	
31	Office and Engineering Supplies
32	Drawings - Electrical Power Distribution System Generating and Transforming equipment Vaults Nos. 1,2,3,4, and 6 Duct Lines Emergency Lighting Power for Signal Towers
32-1	Sanitary Reports
32-1-1	Minutes of meetings of Electrical-Mechanical Subcommittees
32-2	Natural Gas Distribution Line 225# Gas for Car Servicing Gas Extension to Mission Tower
33	Car Servicing Facilities Steam, Air and Water Distribution System in Train Yard Air Conditioning Battery Charging Steam Heating Lighting Ice Storage
34	Agreement with Consulting architects
35	Lease and Agreement with Railway Express Agency
36	Fire Alarm System Burglary Alarm
37	Outside Sanitary Facilities Sanitary Trunk Line Sewers Outside Toilets and Lavatories not located in any building Soil Can Facilities Street Washer, Frame and Valve Incinerator Private Car Sewage Disposal
38	Small Tools and Supplies (other than Engineering) Price Quotations Letters of Agreement
39	Assessments for Public Improvements
40	Shrine Convention - Facilities - General (See File 45-1 for salvage material)
40-A	Miscellaneous matters regarding Shrine Convention as Assembled by H. T. Coffey, Elec. Road Foreman, U. P. R. R. Co.

File No.	
41	Personnel and Organization Architectural Electrical Engineering Landscaping Mechanical
41-1	Personnel and Organization Bonded employes Other bonds made by Terminal
41-2	Personnel and Organization B&B Track and all Gangs All outside men except signal
41-3	Personnel and Organization Signal Force
42	Operations of Terminal, General
43	Union Station Celebration
45	American Legion Convention
45 (a)	Track Prints and Miscl. Correspondence regarding Am. Legn. Con as assembled by H.T. Coffey, Elec. Road Foreman, U.P.
45 (B)	Motor Generator Sets - Am. Legion Convn. as assembled by H. T. Coffey
45 (C)	Parking - Am. Legion Convn. as assembled by H. T. Coffey
45-1	Salvage Material - Shrine and American Legion Conventions
46	Pay Rolls - General - Rates of Pay - Income Tax Returns for all employes, increases and decreases
46-1	Pay Rolls - Increases and Decreases
46-2	Payrolls Deductions Distributions for all employes Time checks
46-3	Pay Rolls California Unemployment Reserves, Instructions
46-4	Pay Rolls Federal Railroad Retirement Act of 1935
46-4-1	Pay Rolls Railroad Unemployment Insurance Act
46-5	Pay Rolls Social Security Act

File No.	
46-6	Pay Rolls Social Security Act Taxes Instructions Governing, etc.
48	Operating Subcommittee Minutes of Meetings
49	Insurance, General Damage Claims Employe's Compensation Public Liability and Property Damage
49-1	Insurance Payrolls of Contractors' and L.A.U.P.T. Inspectors' Statements of Contractors' men and their Rates of Pay
49-3	Insurance Automobiles Accidents Correspondence regarding Terminal Automobile and Truck
49-4	Accident Reports - General (Property)
49-5	Personal Injuries - General (Employes)
49-6	Reports of Accidents to California Railroad Commission and Interstate Commerce Commission
49-7	Insurance, Fire On Construction Office Bldgs., Contents, Construction Materials, etc.
49-7-1	Boilers and Other Pressure Vessels
50	Construction Contracts - General Contracts Instructions for Writing of Notices of Completion Status Reports
50-1	Contractors List of Approved Bidders
50-2	Contract Bonds, General
50-3	Proposals for Construction of Main Station Building
50-4	Proposals for Acoustical Work
50-5	Draft of Contracts, Misel. Specifications

CONTRACT FILES

File No.	Doc. No.	Work	Name of Contractor
34	1	Consulting Architects	John & Donald B. Parkinson
50-101	2	Grading (Furnish, Haul & Place material for earth embankment)	Myers & Co.
50-102	3	Tire Beads Disposal	J. H. Keys
50-103	4	Grading (Delivery of earth embankment for Terminal fill)	George J. Bock & Son
50-104	9	Grading (Delivery of earth embankment for Terminal fill)	Mundo Engrng. Co.
50-105	6	Moving Palm Trees	Smitter Tree Co.
50-106	10	Compacting material in Terminal fill	George J. Bock & Son
50-107	11	Ft. Moore Hill Excavation	Breedlove Bros. (City of L. A.)
50-108		Macy Street Storm Drain	United Concrete Pipe Co. (City of L. A.)
50-109		Grading - (Delivery of earth embankment for Terminal fill)	Griffith Co.
50-110	28	Concrete (Mixing & Delivering concrete for Passenger Subway & Trans. Vault	Consolidated Rock Products Co.
50-111	27	Reinforcing Steel in Passenger subway	Soule' Steel Co.
50-112		Delivery of earth embankment for Terminal fill	A. S. Vinnell Co.
50-113		Equipment Rental (Dump trucks of 2 C. Y. capacity)	John J. Cody
50-114		Equipment Rental (Clamshell or Shovel)	H. N. DeVaney
50-115		Equipment Rental (Rolling, Tamping placing and watering filling material dumped on Terminal property	George J. Bock Co.
50-116	20	Equipment Rental (Crane & Concrete Buckets for placing concrete in Passenger Subway)	Merritt-Chapman & Scott

File No.	Doc. No.	Work	Name of Contractor
50-117	96 102	Drilling Holes - MB&E Unit	Benjamin E. Bertran
50-118	111	Equipment Rental - For grading)	Thomas Walsh
50-119	103	Replant trees	Smitter Tree Co.
50-120	110 110A	Equipment Rental (Excavating equipment, Ford Trucks, etc.	Frank T. Hickey
50-121	108 109 146	Concrete (Batching, mixing and delivering concrete for the mail, Baggage & Express Unit of the Terminal	Consolidated Rock Products Co.
50-122	117	Steel Forms, MB&E Unit	Deslaurier Column Mould Co.
50-123	130 130A	Fabricating and erecting steel for inverted type of train sheds	Consolidated Steel Corpn.
50-124	151	Foundation piling - Main Station Bldg.	Raymond Concrete Pile Co.
50-125	149	Consulting - Acoustical	Acoustical Engineerir
50-126	157	Structural Steel for MB&E Unit	Consolidated Steel Cc
50-127	150	Structural Steel for Main Sta. Bldg.	Consolidated Steel Cc
50-128	165	Main Station Building - General Contract	Robert E. McKee
50-128	1A	Damproofing	F. K. Pullen
" "	1B	Daylight Roofing	B. L. Wilcox
" "	1C	Fire Doors	Calif. Fireproof Door
" "	1D	Glass & Glazing	Raphael Glass Co.
" "	1E	Linoleum	Havstad Linoleum & Ca: Co.
" "	1F	Marble & Tile	Trade & Import Co.
" "	1G	Metal Pan Forms	Steelform Contracting
" "	1H	Mixed Concrete	Consolidated Rock Pro Company
" "	1I	Reinforcing Steel	Soule' Steel Co.
" "	1J	Roofing	Eugene Meloeny

File No.	Doc. No.	Work	Name of Contractor
50-128	1K	Sheet Metal	National Cornice Work
" "	1L	Miscl. & Ornamental Iron	Herzog Iron Works
" "	1M	Steel Windows & Screens	Soule' Steel Co.
" "	1N	Millwork.	Uhrich Millwork Ltd.
" "	1P	Painting	Harry Wasserman
" "	1Q	Towers & Buckets	Steelform Contracting
" "	1R	Waste Moulds	J. F. Watkins
" "	1S	Steel Partitions	E. F. Houseman
" "	1T	Window Shades	L. D. Reeder
" "	1U	Sisalkraft Curing Paper	Blue Diamond Corp.
" "	1V	Spanish Tile	Valencia Spanish Tile
" "	1W	Steel Rolling Door	Kinnear Mfg. Co.
" "	1X	Venetian Blinds	Nat'l Venetian Blind
" "	1Y	Weatherstripping	Ceco Steel Prods. Co.
" "	1Z	Parcel Check Counter	A. J. Bayer
" "	1AA	Plastering	E. E. Schwenk
50-128-2		Material Purchases under Robert E. McKee's Contract - Mi	
" "	A	" " "	" - Form Materi
" "	B	" " "	" - Structural Lum
" "	C	" " "	" - Paving Brick
" "	D	" " "	" - Finish Hardwar
" "	E	" " "	" - Toilet Metal Partitions
" "	F	" " "	" - Floor Hardener
" "	G	" " "	" - Foreign Line Freight Charge
50-128-3		General Contract with Robert E. McKee For construction of M & B	
50-128-4		do	Alternate Proposals
50-128-5		do	Extra Work or Charge Orders

File No.			
50-128-6		General Contract with Robert E. McKee for Construction of M & B	- Accounting Matt
50-128-7		" "	- Sub-Contractors Insurance Bonds
50-128-8		" "	- Accidents & Inj
50-128-9		" "	- Coordination of Other Contract with General Cc act
	Doc No.	Work	Contractor
50-129	167	Boilers (Furnishing, installing & testing 3 steam boilers)	C. C. More & Co., Inc
50-130	159	Refractories - Boilers	J. T. Thorpe, Inc.
50-131	183	Pneumatic Tube System	The Lamson Co.
50-132	193	Plumbing	F. D. Reed Plbg. Co.
50-133		Fire Alarm System	American District Telegraph Co.
50-134	200	Color Consultant	Herman Sachs
	267	Decorating "	" "
50-135		Mural Painting (Work not done)	
50-136	199	Painting Structural Steel	G. C. Hewitt Co.
50-137	213	Electrical Work	Chandler Elec. Co.
50-138		Ornamental Light Fixtures (Main Concs)	- B. B. Bell & Co.
		" " (Wait. Rm.)	- Phoenix Day Co.
		" " (Vestibule, Mail Arcade & Passageway)	- Wagner-Woodruff
50-138-1	266	Strip Lighting	Schweitzer Bros., Inc
50-139	226	Leasing of Meyer Steelforms	Ceco Steel Products C
50-140	329	70,000 Gallon Water Tank	Chicago Bridge & Iron
50-141	227	Sound System	Leo J. Meyberg Co.
50-142	241	Steel Signal Bridges	Westn. Pipe & Steel C
50-143	238	Rental of Crane	Metcalf Crane Ser.
50-144	248	Avila Street Retaining Wall Piling	Raymond Concrete Pipe

File No.	Doc No.	Work	Name of Contractor
50-145	240	Exhaust Systems	H.S. McClelland, Inc
50-146		Copies of Extension - Acoustical work	
50-146-1	271	Acoustical Treatment of Station Bldgs.	Harold E. Shugart Co
" "2	272	" " "	English & Lauer
" " -3	275	" " "	Marine Engrng. & Supply Co. (U.S. Gyp Co.)
50-147	253	Boiler Room Piping	Asso. Pipe & Engr. C
50-148	251	Heating Systems	H.S. McClelland, Inc
50-149	PS732	Freight Elevators	King Machine & Mfg. (Shepard Elev. Co.
50-150	254	Landscape Architect	Tommy Tomson
50-151	257	Pipe Insulation	Marine Engr. & Suppl
50-152	299	Waiting Room Furniture (Settees)	Angelus Furniture Co
50-153	268	Asphalt Concrete Paving Systems	Griffith Co.
50-154	263	Heating Control Systems	Johnson Serv. Co.
50-155	332	Signs - Informative, Directional, & Ornamental	Beranek & Erwin
50-155-1	321	Bulletin Boards	Tablet & Ticket Co.
50-156	270	Ornamental Metal Column Encasements	H.S. McClelland, Inc
50-157	300 340	Plastering	E. E. Schwenk
50-158	292	Landscaping	R. W. Hamsher
50-159	290	Floor Surfacing	Kalman-Calrock
50-160	294	Cabinet Work	Petersen Show Case & Fixture Co.
50-161	282	Painting Exterior Concrete Surfaces of Station Buildings	G. C. Hewitt Co.
50-162	298	Decorating Work in Main Station Building	G. C. Hewitt Co.
50-163	291	Conveyors	Stephens-Adamson Mfg

File No.	Doc. No.	Work	Name of Contractor
50-164		Millwork	The J. Niederer Co., Woodworkers
50-165	295	Tile Floors, Walls & Base, Sec.I	Trade & Import Co.
	315	Tile work in kitchen area of main Station Bldg.	" "
50-166		Venetian Blinds in Sec.I of MBE Bldg.	American Awning & Blind Co.
50-167	296	Gunite - Application in Secs. II to VI of MB&E Bldg. & Sec.XIV of MSB	L. A. Cement Gun Co.
50-168	303	Air Conditioning & Ventilation of Station Buildings	H. S. McClelland, Inc
50-169	308	Steel Racks & Shelving	Berger Mfg. Co.
50-170	310	Brickwork	Trade & Import Co.
50-171	317	Hydraulic Cement Tile in Restaurant	Valencia Spanish Til
50-172	314	Red Cap Carts	Howard F. Ward, Inc.
50-173	338	Steel Lockers	Lyon Metal Prods., Ir
50-174	323	Dumb-Waiters	King Machine & Mfg. (
50-175	328	Lighting Fixtures	Strickley, Stein & G
	325	Wrought Iron Fixtures	Solar Lighting Fixtu
50-176	318	Lithochrome Staining	L. M. Scofield Co.
50-177	319	Ornamental Metal Posts & Chairs	Architectural Metal
50-178	320	Water Chilling System	Western Air & Refrig.
50-179	322	Incinerator	J. T. Thorpe, Inc.
50-180	324	Fixtures in Soda Fountain & Cocktail Bar	Liquid Carbonic Pac. Corp., Ltd.
50-181	327	Refrigerators in Kitchen	Van-Fleet-Freear Co.
50-182	326	Cigar, Cashier's Stand and News Stand in Luncheonette	Chas. V. Stegner & S
50-183	330	Zeon Tubing in Cocktail Room	Electrical Products (
50-184	337	Chrome Furniture - Lounges	The Howell Co.
50-185	334	Refrigerating Equipment for Built-in boxes in restaurant	Baker Ice Machine Co.

File No.	Doc. No.	Work	Name of Contractor
50-186	339	Chain Link Fencing	Standard Fence Co.
50-187	336	Millwork - Cabinet work	A. W. Zimmerla Corp.
50-188	333	Core Drilling of Holes in Tile & Reinforced Concrete Floors	Frank L. Howard Engr
50-189	335	Cooling Tower in Boiler Room	The Fluor Corp., Ltd
50-190		Copper Doors & Metal Frames Sec. XIV	J. Royden Estey
50-191		Erection of L. A. Transfer Co's. Steel Office	Arch. Metal Works
50-192		Mixwax Concrete Floor Finish	Williams Waterproofi
50-193		Office Furniture in Station Bldg.	Angelus Furniture & Co.
50-194		Cactus Monterey Entrance Mats	Cactus Mat & Patch M Co.
50-195		Resistance Floor Treatment	Stanley D. Smith
50-196		Negatives of Contractors Spec.	
51		General Tripartite Terminal Agreement	
53		Minutes of Meetings of Board of Managers	
53-1		Rulings and Instructions, Miscellaneous ARA, etc.	
54		Legal Matters, not otherwise classified	
55		Land Appraisals	
56		Title Reports	
57		Daily Reports B&B Track & Signal labor	
58		Progress Reports - General (Weekly)	
58-1		Construction Program	
58-2		Monthly Progress Report	
59		Accounting, General, Rulings, etc.	
60		Construction Materials, General Requisitions Instructions Governing Prices	

File No.	Doc. No.	Work	Name of Contractor
60-1		Construction Materials Advertising Matter, Correspondence only Requests for catalogs	
60-2		Materials, General Inspection and Tests Schedules and Reports on Miscellaneous Materials - Raymond G. Osborne	
60-2-1		Inspection and Tests Schedule and Reports Reinforcing Steel - Robert W. Hunt Co.	
60-2-2		Inspection and Test Schedules and Reports Structural Steel for Train Sheds - Robert W. Hunt Co.	
60-2-2 (A)		Inspection and Test Schedules Structural Steel other than Train Sheds - R. W. Hunt C	
60-2-3		Inspection and Miscellaneous Materials 1. Steel & Iron Pipe - Robert W. Hunt Co. 2. Boilers - " " " 3. Fire Brick, Tubes, Plates - Smith-Emery	
60-2-4		Inspection of Rail and Other Track Material - R.W. Hunt	
60-3		Construction Materials - O. S. & D. Claims	
60-4		Inventories of all Construction Materials	
60-5		Construction Materials - Tracing Cars	
60-6		Surplus Construction Materials Minutes of Meetings of Storekeepers subcommittee	
60-7		Construction Material Charged direct.	
61		Equipment Rental, Work Train Service, etc.	
62		Transportation of Materials	
62-1		Demurrage - Rules & Charges Tariffs Correspondence	
63		Transportation for Employes Passes, etc.	
64		Fire Protection - General Fire Hydrants Fire Extinguishers	
65		Reports of Financial Status Expenditures to Date, etc.	
65-1		Studies relative to Overexpenditures	

File No.	
67	Railroad Time Cards and other Railroad Publications
68	Extra Copies of Contracts - Main Station Building
69	Extra copies of specifications - Instructions to Bidders Addenda - Main Station Bldg. - Odd Sheets
70	Historical - Miscellaneous
71	Blue daily copies of letters written from Construction Office.

B. LANDSCAPING

HEDGES - TREES - ETC.
LOS ANGELES UNION PASSENGER TERMINAL

HEDGES

Location	Name
Alameda Street	Viburnum Suspenum
Macy Street - Line "H"	Carissa Grandiflora
Parking Islands - Center Section	Buxus Japonica
Parking Island - End Section	Mrs. Roeding Oleander
Main Island	Viburnum Suspenum
Around Lights	Myrtus Compacta
South Patio	Myrtus Compacta

TREES

Front Yard	Olives	-	Nevidillo & Mission
" "	Palms	-	Washingtonia Robusta
	"	-	Washington Filifera (Native Calif.)
	"	-	Phoenix Canariensis (Date)
	Rubber	-	Ficus Macrophylla (Rubber)
South Patio	Palms	-	Washingtonia Robusta
	Olives	-	Nevidillo & Mission
	Peppers	-	Schinus Molle
North Patio	Oranges	-	Washington Navels & Valencias
	Jacaranda's	-	Jacaranda Mimosisalla
	Eucalyptus	-	Eucalyptus Citriodara
	Live Oaks	-	Querous Agrifolia
	Figs	-	Espallier Fig
	Sycamore's	-	Plantanus Racemosa

UST:X51

(from Edward Hoak's notebooks)

October 28, 1938 File 50-158

r. W. H. Kirkbride
ngineering Committee, AAUPT
an Francisco, California

ear Sir: Landscaping

In the meeting of the Architectural Subcommittee this morning Mr. Christie notified the other members of the committee that he desired to have an alternate proposal made on younger and smaller trees, somewhat as indicated in his letter to the committee, dated October 24, 1938. In consideration of this alternate, the committee has requested that I write you and explain the reasons why trees of the size specified were considered desirable.

South patio contains 4 California peppers. The height specified by Mr. Tomson, in order to provide the architectural effect, is 25' to 30'. A tree of this height spreads approximately the same dimension, and according to custom, as determined by the approved practice of the Horticultural Institute, is moved in a 7' box. Another consideration in connection with these trees is the necessity for a clear headroom of 8', and with a tree of this size this clearance can be provided only by a selection of the material. If the height and spread of this tree were reduced, the clearance would be reduced also, and if an attempt were made to provide the required headroom by trimming, the effectiveness of its irregular branch growth would be largely destroyed.

The same comments apply to the olive trees, of which there are 10 in the south patio and 8 directly west of the main arcade. Mr. Tomson has selected the Nevidillo olive which has a rather dark and shiny leaf in contrast to the drab gray of the Mission olive, and a rather dark trunk structure. Here again the olive grows with an irregular branch structure so that if a smaller tree were selected and trimmed to provide the clearance, it would be quite destroyed as far as symmetry is concerned and would not give the effect desired, even now or in later years when it had acquired a fuller growth. This olive tree is slow growing and the size specified, being practically full grown, would not require any more than normal pruning to keep it under control during future years.

The problem, both in connection with the California peppers and the Nevidillo olives, and for that matter the Magnolias in front of the building, is that of headroom. The Magnolias are specified at a height of 15'. This automatically places them in a 30" box, but a reduction in box size reduces height of tree and brings down the clearance. The Magnolias must give automobile clearance. This matter of clearance, even with the trees as specified, requires individual selection of every tree to provide this clearance; we cannot accept the run of the grove even with these specifications.

The principal item of expense, probably 90%, in the moving of the tree is its handling, as all of these trees will be handled by crane or other mechanical apparatus, and it makes little difference as far as expense is concerned whether the weight is reduced a ton and the box dimension reduced in size. The height of the palm trees was determined by the architectural effect. In the front of the building, as practically all of the landscaping has been eliminated, it is felt by Mr. Tomson that the desired effect would not be had in the use of materially smaller trees. Here again the cost of a tree with a trunk 10' or 15' shorter probably would not reduce the cost of the tree at all. Same comments apply to the palm trees in the south patio.

Mr. Tomson, in writing his specifications and in determininghis tree heights, has considered the fact that all the trees specified are readily available from several sources so that competition in bidding is necessary. There are only two instances where some scouting is going to be necessary to find the tree specified, and that is the case of the two twin fan palms in the south patio, and if necessary to avoid paying a premium for these twins, the same effect can probably be acquired by using separate trees set closely together.

I have given Mr. Christie a copy of a rendering made by Mr. Tomson of the south patio. I belive that it illustrates better than words what I have attempted to describe above. I have also given him two prints showing the elevation of the front of the depot and the walls of the south patio, on which are indicated the heights of the trees specified. I believe that this, too, illustrates the effect

. H. Kirkbride - #3

October 28, 1938
File 50-156

Mr. Tomson has in mind and the probable result if the heights and spreads were materially reduced. All these s with exception of the California peppers are slow grow- and the entire landscaping scheme is based upon an diate effect as far as the landscaping architecture is erned without waiting a considerable period for trees of ler size to attain their growth. In the case of the fornia peppers it is desired that they grow considerably ger than the sizes specified.

Mr. Tomson will be very glad to go to San Francisco explain to you in person, and more fully, what I have mpted to explain in this letter. If this meets with your roval, I will so arrange.

Bids are now out for the trees specified and are arnable on Monday, October 31st. I would like to suggest you that the results of these proposals be tabulated and erred to you and other members of the Engineering Committee ore considering securing prices on much smaller material.

Yours truly,

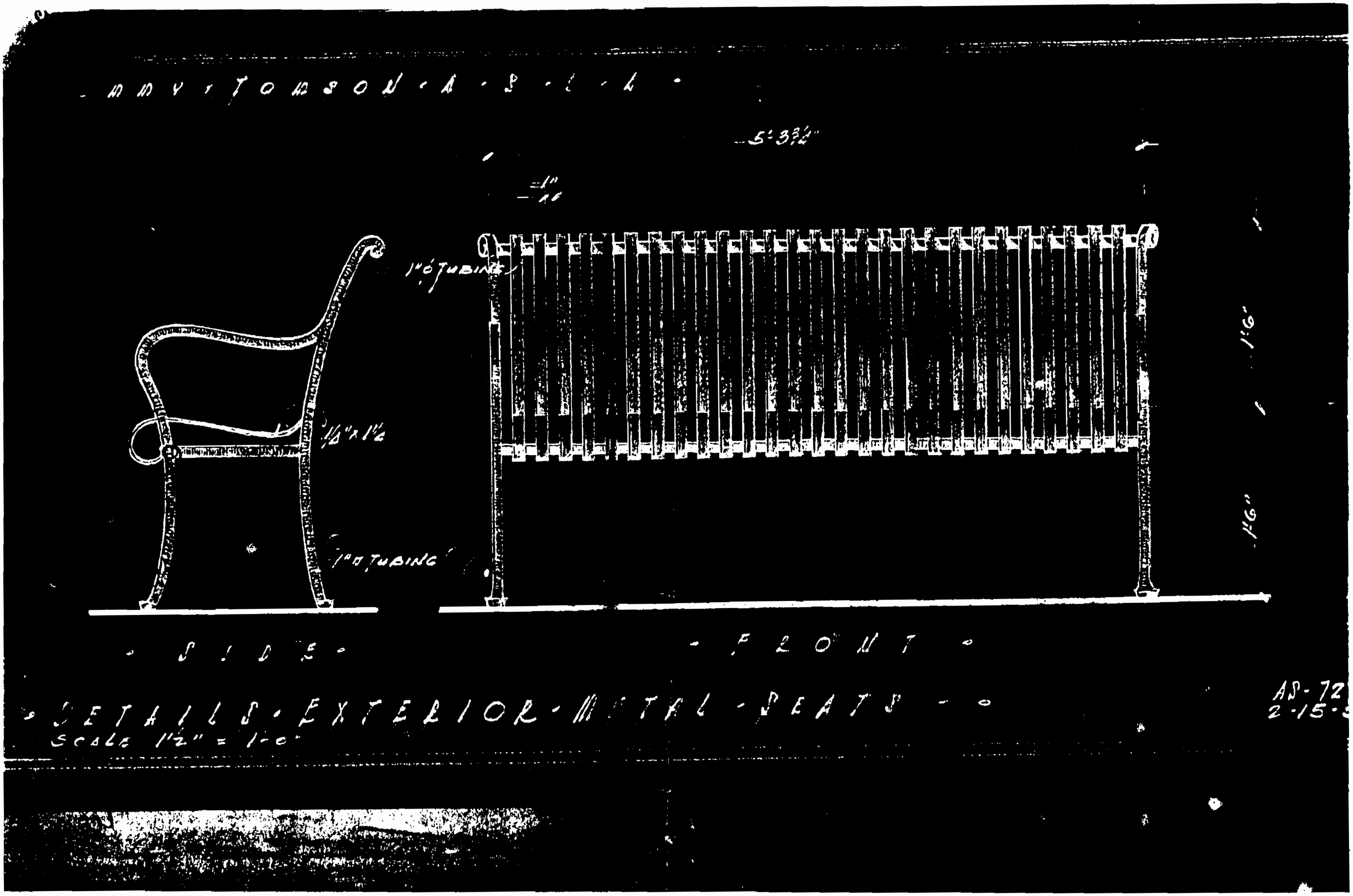
- Messrs:

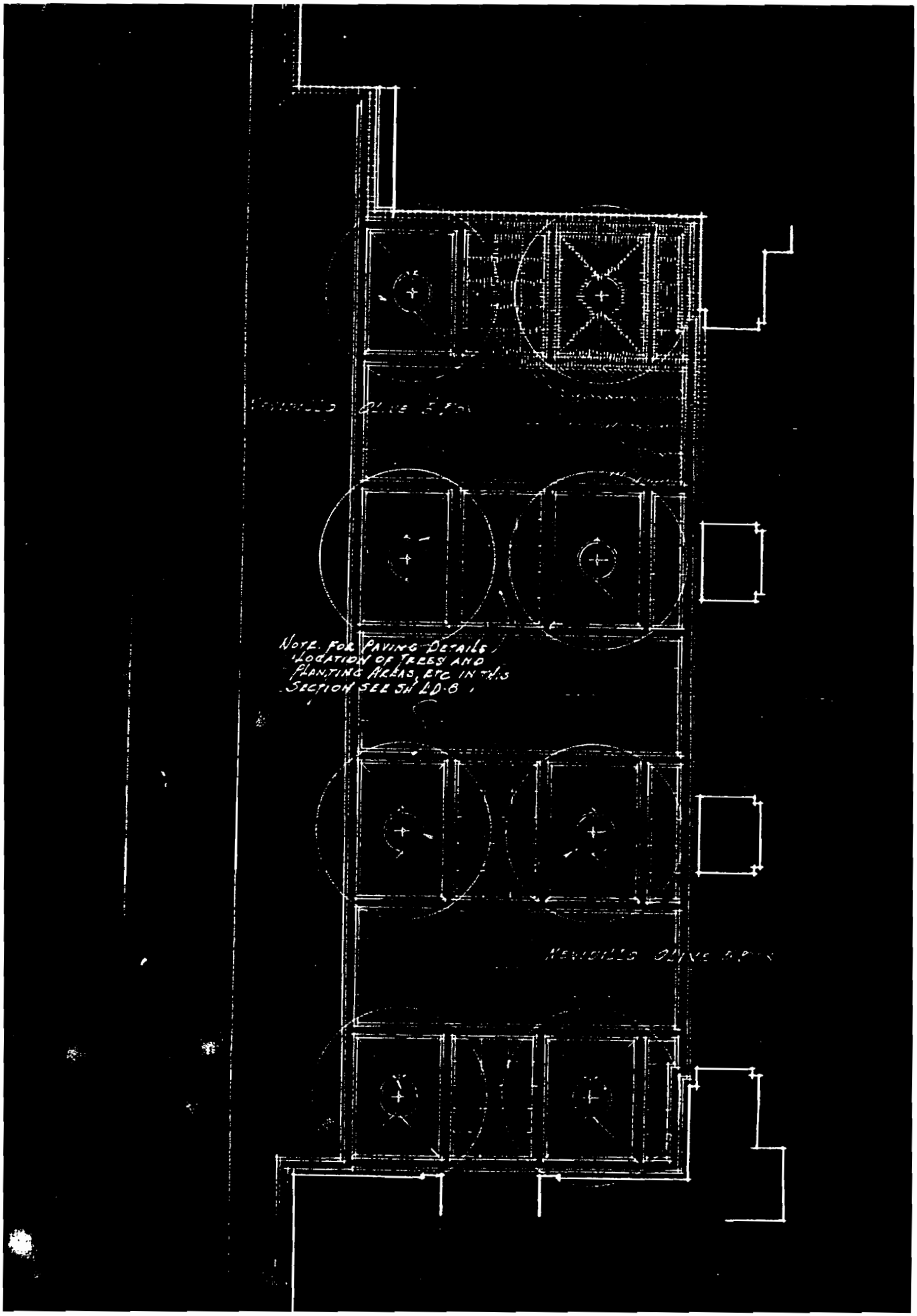
M. C. Blanchard
L. T. Jackson
C. F. Donnatin

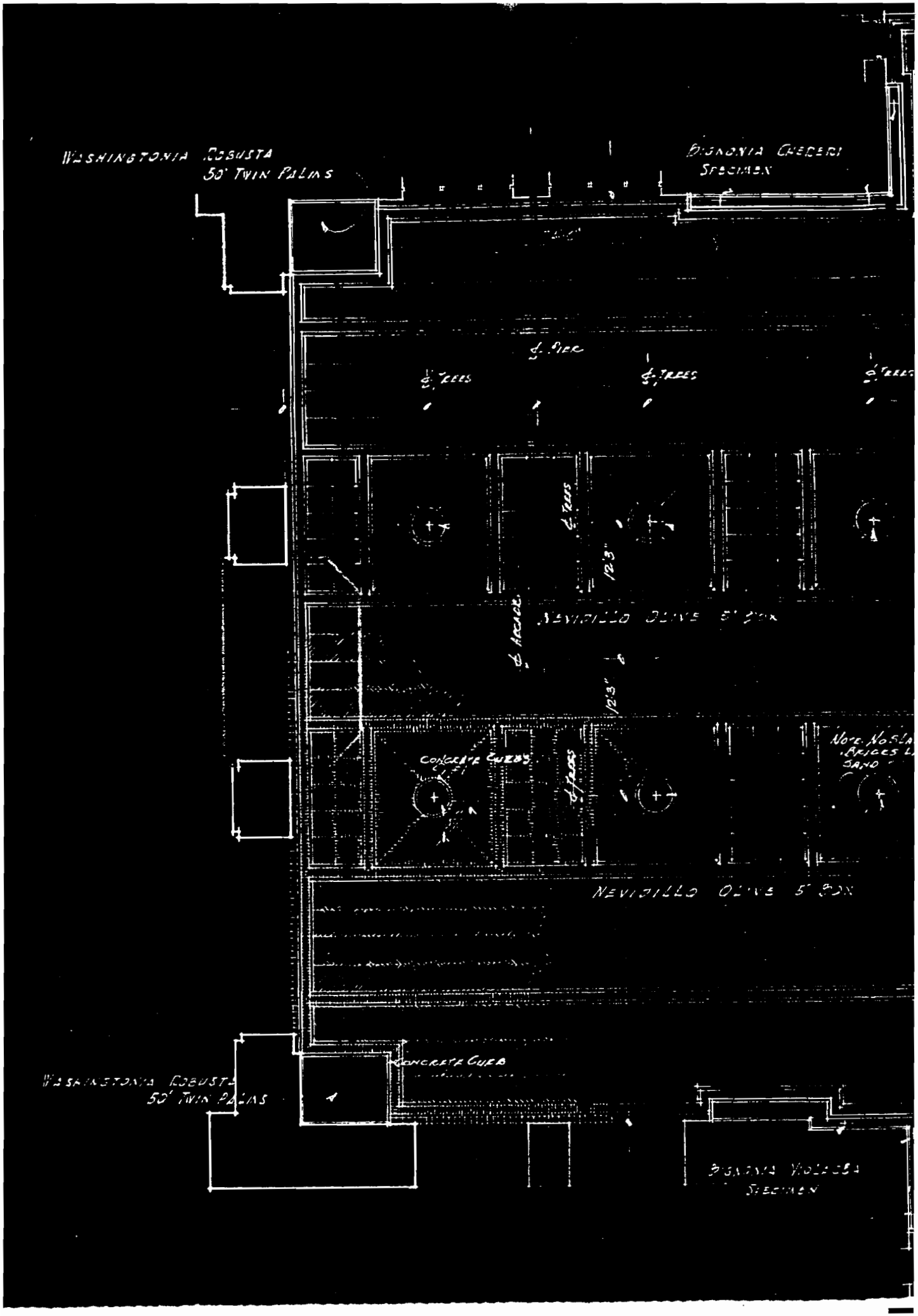
H. L. Gilman
R. J. Wirth
J. H. Christie

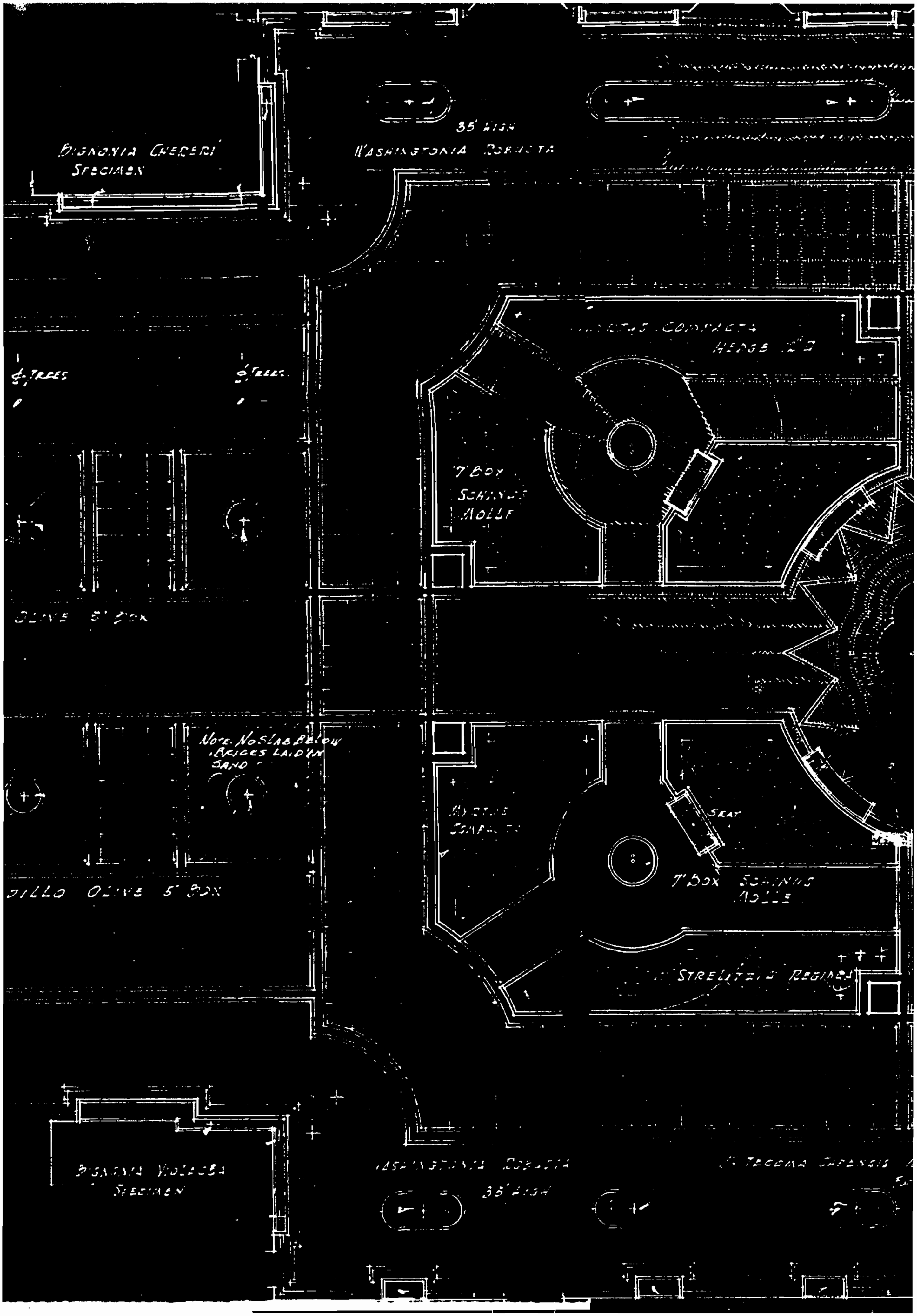
- Mr. Tommy Tomson

WN:PP

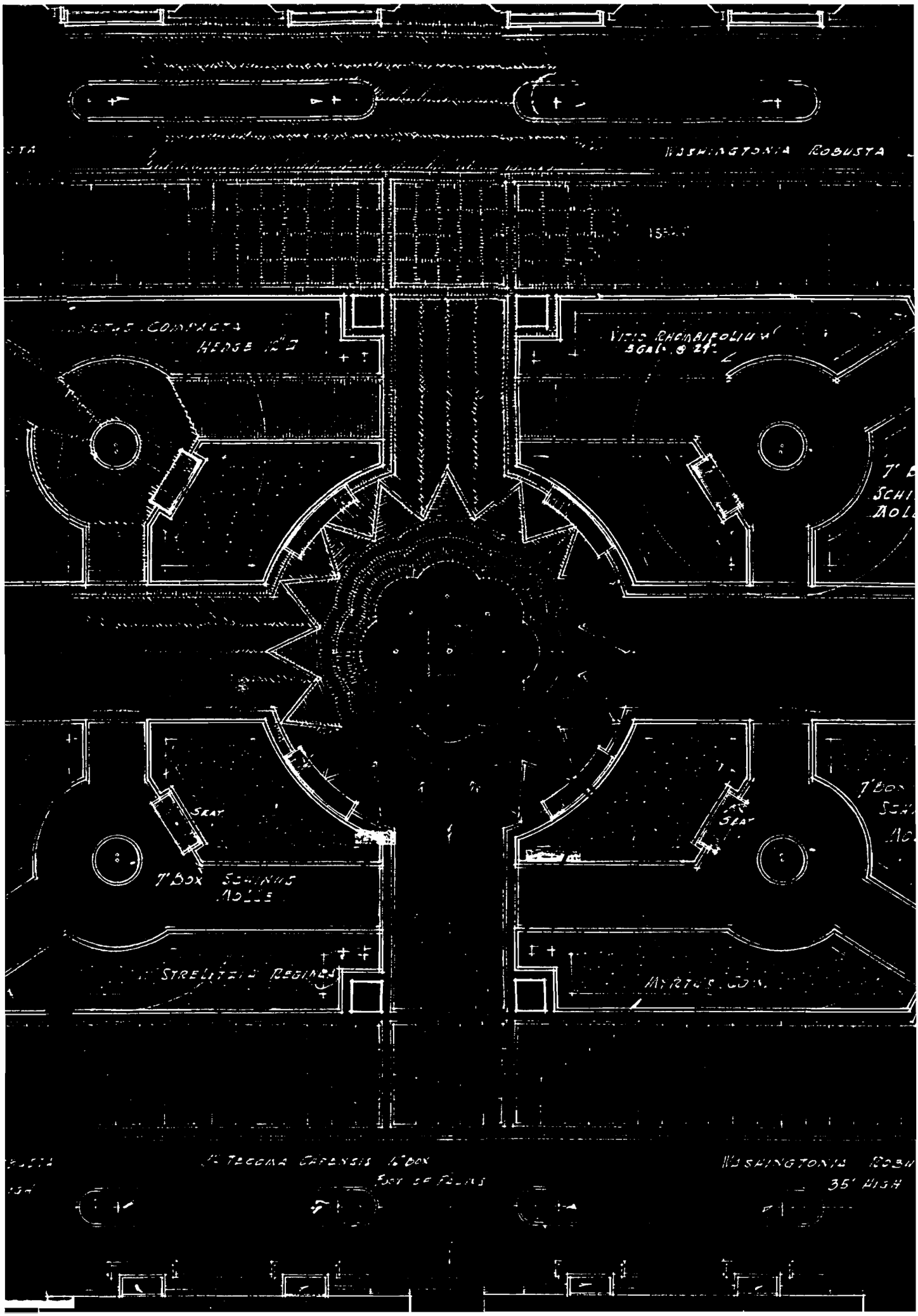

5'-3 3/4"
1'6"
1'6"
1"Ø TUBING
1/4" x 1 1/2"
1"Ø TUBING
SIDE
FRONT
DETAILS - EXTERIOR - METAL - SEATS
SCALE 1 1/2" = 1'-0"
AS-72
2-15-

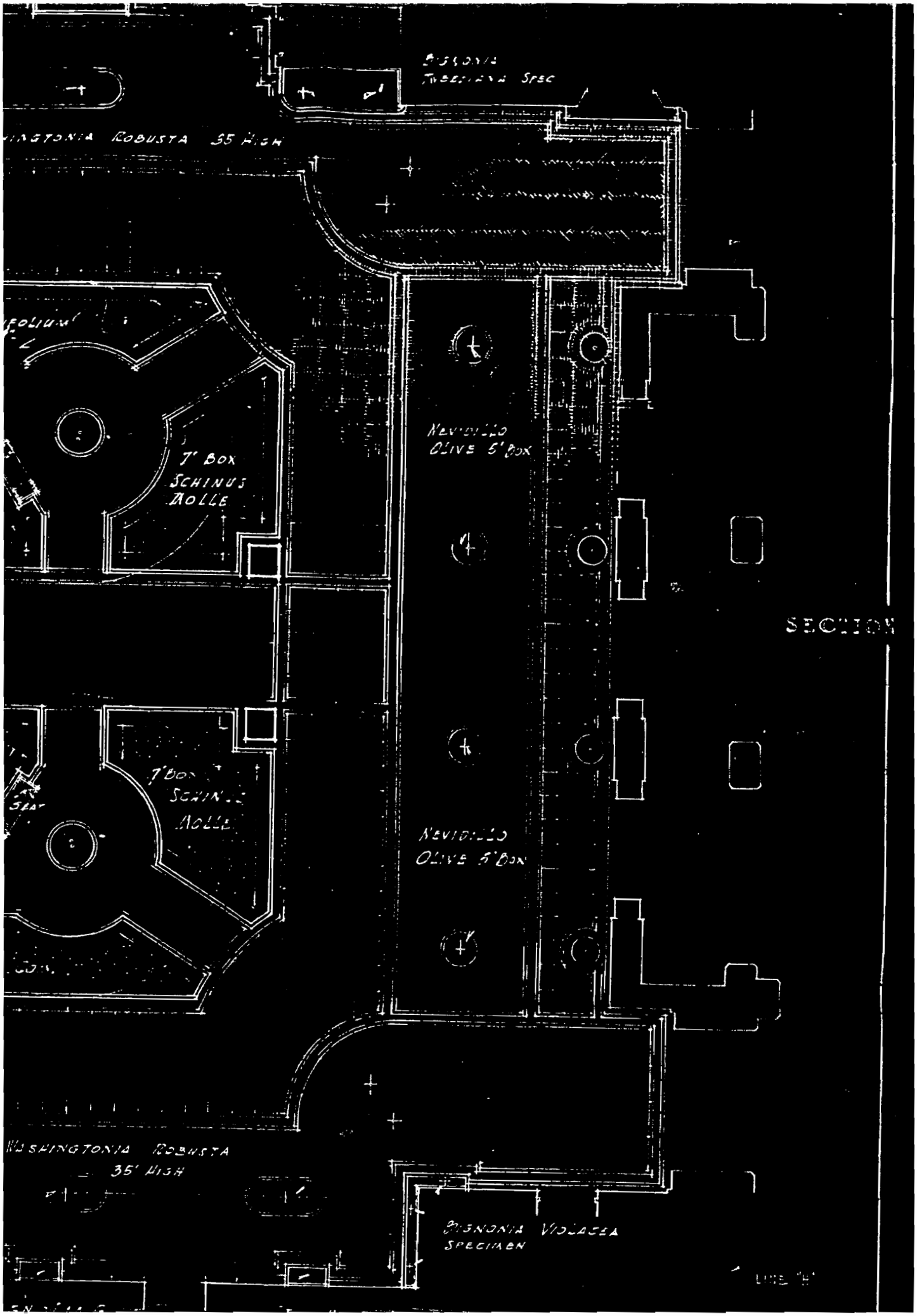

NOTE: FOR PAVING DETAILS, LOCATION OF TREES AND PLANTING AREAS, ETC IN THIS SECTION SEE SH LD-6


WASHINGTONIA ROBUSTA
50' TWIN PALMS
BIGNONIA CHEDERI
SPECIMEN
& TREES
& TREES
& TREES
& TREES
& TREES
12'3"
12'3"
NEVIDILLO OLIVE 5' BOX
NEVIDILLO OLIVE 5' BOX
CONCRETE CURBS
CONCRETE CURB
WASHINGTONIA ROBUSTA
50' TWIN PALMS
BIGNONIA VIOLACEA
SPECIMEN



BIGNONIA CHERERI
SPECIMEN
35' HIGH
WASHINGTONIA ROBUSTA
HEDGE 12"
TREES
TREES
7' BOX
SCHINUS MOLLE
OLIVE 5' BOX
NOTE. NO SLAB BELOW BRICKS LAID IN SAND
SEAT
7' BOX SCHINUS MOLLE
OLIVE 5' BOX
STRELITZIA REGINAE
BIGNONIA VIOLACEA
SPECIMEN
WASHINGTONIA ROBUSTA
35' HIGH
TECOMA CAPENSIS


WASHINGTONIA ROBUSTA
BUXUS COMPACTA HEDGE 12"
VITIS RHOMBIFOLIA 3 GAL. @ 24"
SEAT
SEAT
7' BOX SCHINUS MOLLE
STRELITZIA REGINAE
MYRTUS COM.
7' BOX SCHINUS MOLLE
TECOMA CAPENSIS 16' BOX
FOOT OF PALMS
WASHINGTONIA ROBUSTA
35' HIGH


WASHINGTONIA ROBUSTA 35' HIGH
7' BOX SCHINUS MOLLE
NEVIDILLO OLIVE 5' BOX
SECTION
7' BOX SCHINUS MOLLE
NEVIDILLO OLIVE 5' BOX
WASHINGTONIA ROBUSTA 35' HIGH
BIGNONIA VIOLACEA SPECIMEN

C. LIGHTING

LOS ANGELES UNION PASSENGER TERMINAL

January 17, 1938

MEMORANDUM

~~File 16-8~~

File 16-11

Mr. A. J. Barclay
Construction Engineer
Los Angeles, California

cc " 16-1-2

SUBJECT: Passenger Subway Lighting

Dear Sir:

1) In a recent memorandum to you I stressed the point regarding selection of floor finish colors for the Passenger Subway. My interest in this subject is due to the illumination and maintenance problems involved.

2) The floor colors selected are (a) black, (b) russet, and (c) terra cotta. All these colors are excellent light absorbers, conversely, poor reflectors. In my memorandum I pointed out that better colors would be greens and yellows, lighter shades preferred. To these colors could be added light grays and browns, if added contrasts are desired.

3) An illusion can be created by using light greens and blues as they will make the subway appear wider, provided the striping is not run longitudinally. The present plan calls for longitudinal striping and regardless of the color scheme, will create the feeling of narrowness. Fundamentally this is wrong, the crosswise (transverse) striping should be used to create the feeling of spaciousness.

4) Locomotives burn oil and when oil is burned soot is created. There is no way of preventing some of this soot filtering into the subway and onto the floor. Foot traffic will grind it into the pores of the floor finish and it will be carried via shoe leather into adjoining station building areas.

5) This soot creates two maintenance problems:

(a) Luminaire maintenance
(b) Floor cleaning maintenance.

These will be discussed in the above order:

LUMINAIRE Maintenance: Electric lamps, reflectors and reflecting surfaces depreciate and allowance must be made for this in the initial design. During the life of the lamp its lumen output will average about 85 to 90% its initial light output. Dust

penetrates and collects on the light reflecting surfaces and accounts for another 10 to 20% loss. A study of the subject will reveal that the designer cannot depend on obtaining more than about 70% of the initial light output on an average. The illuminating apparatus provided for, and about to be installed, will provide about 5 footcandles of illumination 24 inches above the floor level - this is about the average for the entire subway. Due to depreciation of the apparatus only about 3.5 footcandles will be realized. Due to the large volume of traffic to be handled, over a relatively short time interval, this quantity of illumination may be considered the minimum. (It should also be kept in mind that at the time the subway illumination system was designed and installed the railroads were hard pressed to make outgo and income meet curtailed operating schedules.) In order to keep the lighting bill at as low an amount as is consistent with safety, control lenses are being installed that direct the light to the floor and the illumination of ceiling and side-walls, above the four foot level, are dependent on reflected light from said floor.

Floor Cleaning Maintenance: Due to finely divided soot being ground into the surface pores of the floor finish, the floor color will progressively darken. Thus, with the passing of time, no matter what floor color is selected it will gradually darken. If dark colors are initially selected maintenance will be higher than if lighter colors are used. No matter how much dark colored floors are scrubbed they will not appear clean after a few years intensive use, such as they will have to withstand in the subway. The floor should be finished smooth and no steel tired vehicle permitted to roll over its surface, only rubber tires should be used. Otherwise, the finish will become roughened, the opportunity for soot to accumulate increase, the floor darken more rapidly and the cost of maintenance increase.

6) From the foregoing engineering viewpoint it is seen:

(a) Dark floor colors will absorb entirely too much light and not reflect a sufficient amount for desirable illumination of the side-walls and ceiling.

(b) Floor cleaning maintenance will increase with the use of dark floor finishes as it requires more cleaning labor and supplies to give a dark colored floor a clean appearance than one of lighter color.

(c) The lighter colors of gray, brown, green, yellow and blue have satisfactory light reflecting characteristics. Any color selected will gradually darken, with time, under Terminal use conditions.

(d) The selection of dark colors will increase the cost of maintenance due to -
1. Increased use of electricity due to poor reflecting characteristics.
2. Increased amount of labor and supplies required to make a dark floor appear clean.

(7) In talks I have had with members of the Electrical Engineers Subcommittee, I know they had no inkling that dark floor finishes would be used in the passenger subway. Otherwise, a different spacing of the lighting fixtures would have been provided. I also know they have no desire to dictate purely architectural matters that are the concern of the Architectural Committee. It is felt, however, that in selecting color schemes that consideration be given to the quantity of illumination provided, or intended to be provided.

(8) As matters now stand the illumination of passenger occupied areas is as follows:

(a) Passenger Subway. Fixtures purchased, recesses cast into subway roof, amount of illumination fixed and cannot be increased without resorting to underfloor illumination.

(b) Train Concourse and Reception Lobby. Fixtures east of Train Gates purchased. Fixtures in Reception Lobby and Train Concourse not purchased, but a contract has been let for the installation of all other electrical work.

(c) Exit Arcade. Fixtures not purchased, but a contract has been let for the installation of all other electrical work.

(d) North & South Patios. Fixtures not purchased, but a contract has been let for all other electrical work.

(e) Waiting Room. Fixtures not designed or purchased, but a contract has been let for all other electrical work.

(f) Main Concourse, Vestibule or Information Lobby, Terminal Office Building, North and South Arcades, Clock Tower. Fixtures not designed or purchased, but a contract has been let for all other electrical work.

(g) Restaurant-Kitchen. Fixtures not purchased, all electrical conduit embedded in concrete installed and contract let for all other electrical work.

(h) Garage Basement. Conduit in basement, beneath Waiting Room, embedded in concrete is installed. Now installing embedded conduit in that portion beneath Main Concourse. Contract let for all other electrical work.

(i) Arcade between Vestibule and Restaurant. Fixtures not designed, but conduit in place and an electrical contract let.

(9) Now, in every one of the areas mentioned in paragraph (8) the maximum illumination intensity has been set, sizes of wires, switches, and the like, decided and a contract let for their installation. It is therefore suggested that Messrs. Gilman and Lebenbaum be contacted regarding the advisability of a joint meeting of their respective committees at which intensity of illumination, finish colors, and any special provision for illuminated areas be discussed. Otherwise, the Terminal may be confronted with a situation similar to that now had in the passenger subway.

Yours truly,

W. A. S. HARMON
Mech.-Elec. Engineer

WASH:DC

LOS ANGELES UNION PASSENGER TERMINAL

November 8, 1937

MEMORANDUM

File 16-1
cc - 16-1-2

Mr. H. E. Hayes:

SUBJECT: Garage Ceiling Lights
Sections XI & XII

Dear Sir:

(1) I am in receipt of a memorandum from Mr. A. J. Barclay, instructing the running of all conduit, wherever feasible, in the concrete slab. He also desires that the exit lights be installed in a box set in the concrete, flush mounted.

(2) In your absence I discussed the running of the branch lighting circuits in the concrete with Mr. Roehrig and Mr. Johannsen. It was their belief that conduit up to and including 1-1/4" sizes could be run in the concrete, but the 1-1/2" and larger sizes, these being the feeders, we would run exposed beneath the beams. They are proceeding with the necessary drawings on this basis.

(3) Where light outlets come above the garage exhaust system, we are moving the duct work. Should it happen that isolated lights would be located above the duct, and it is not possible to change the duct location, we can make an extension of the conduit through the duct and locate the outlet beneath said duct.

(4) I do not know whether it will be possible to set the exit light fixture boxes flush mounted, without entailing considerable structural changes for Mr. Bockemohle. In the basement the exit light fixture box can be surface mounted, but where such light fixtures occur in passenger areas we will undoubtedly be compelled to use the flush mounting. This is a detail that will have to be settled with Mr. Bockemohle.

(5) Fire Alarm Boxes. According to present architectural plans they have moved the flush mounted fire alarm box from the southeast corner of the Waiting Room to a location behind a grille located on the west wall, just east of the door leading to the South Patio. This location

ANGELES UNION PASSENGER TERMINAL

SOUTHERN PACIFIC COMPANY
THE ATCHISON, TOPEKA AND SANTA FE RAILWAY CO.
UNION PACIFIC RAILROAD COMPANY

JUL 22 1937

932230/340 (11)

San Francisco, CALIFORNIA July 20, 1937.

Mr. A. J. Barclay,
Construction Engineer, LAUPT,
726 North Alameda Street,
Los Angeles, California.

Dear Sir:

Referring to the discussion during the Electrical Subcommittee meeting of July 14, 1937, concerning the preparation of drawings showing the clock, fire alarm, telephone and miscellaneous conduits:

Suggest that the following be included in these plans:

1. Conduit running under floor in Train Concourse, from basement under Station Master's office and stubbed up out of floor under the counter for ticket collector near the intersection of Lines E and 29. Size 1¼".

2. Loops or "U's". Conduits stubbed up similarly connecting up the counters E-29 to E-28; E-28 to E-27; etc. Size 1¼".

3. Provide holes in floor of Station Master's office at east wall at counter to bring up wires in the future, connecting office with ticket collectors.

4. Provide a method of bringing a 3/4" signal conduit into garage from Emergency Room.

5. Provide holes in Main Concourse floor at Ticket Counters so that future signal conduit from Station Master's office or Train Concourse may be brought into them from garage. There should be three holes, one under either end of the counter and one in the middle of the counter.

Suggest that this matter be considered during the time interval before next meeting, with a view to providing other conduits and holes for future possible similar use.

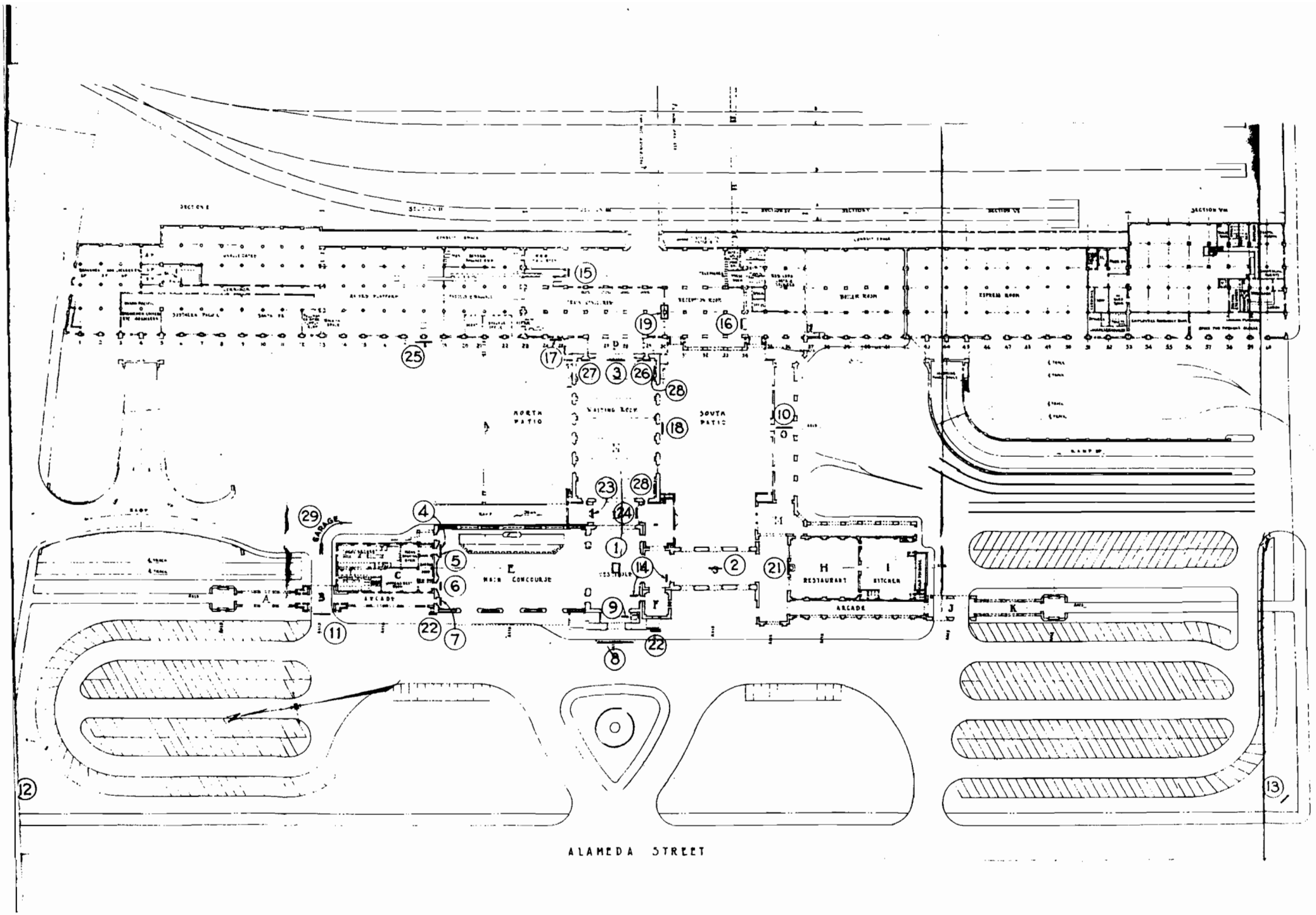
Yours truly,

Paul Lebenbaum

Paul Lebenbaum, Chairman,
Electrical-Mechanical Subcommittee.

cc-Messrs: A B Young (2)
L T Jackson (2)
C F Donnatin

D. SIGNAGE


NORTH PATIO
SOUTH PATIO
WAITING ROOM
MAIN CONCOURSE
RESTAURANT
KITCHEN
ARCADE
GARAGE
ALAMEDA STREET

HEWITT ST.

ALISO STREET

Nº	LOCATION	DESCRIPTION	REMARKS
1	Vestibule - Infor. Booth Unit E	INFORMATION - TICKETS - TRAINS - WAITING ROOM - RESTAURANT	Electric - Reads 4 ways
2	Arcade " G	TICKETS-RESTAURANT	Reads both sides
3	Waiting Room " N	TRAINS	
4	Main Concourse " E	BARBER SHOP	
5	" " " "	MEN'S LOUNGE	
6	" " " "	WOMEN'S LOUNGE	
7	" " " "	TO STREET CARS	Electric
8	Marquise - Main Entrance	UNION STATION	
9	Vestibule Unit E	GARAGE	Electric - Reads both sides
10	Taxi Arcade " O	WAITING ROOM	Reads both sides
11	North " " B	GARAGE - BAGGAGE	Electric
12	Macy & Alameda Sts.	UNION STATION	Electric - Neon
13	Aliso " " "	UNION STATION	" "
14	Vestibule Unit E	TELEGRAPH & TELEPHONE	Electric
15	Train Concourse Section III	BAGGAGE ROOM	"
16	Reception Room " "	TAXIS	"
17	East End North Patio	BAGGAGE ROOM	"
18	North side South Patio	WAITING ROOM	" over Wait, Rm. Door
19	Train Concourse Section III	DEPARTURES	Electric - Train Bulletin. See Arch. Dwg. III-50
	Reception Room " "	ARRIVALS	
20	Passenger Subway	"TRACK 1", "TRACK 2", (ETC)	Electric
21	Restaurant Lobby Unit G	RESTAURANT	See Arch. Dwg. XIV-A-9
22	Outside Main Bldg. Units E & F	TO STREET CARS	
23	Passage - Section XI Unit L	DRUGS	See Arch. Dwg XI-A-9
24	" " " " "	PARCELS	" " " " " "
25	North Courtyard Section IX	BAGGAGE	
26	Waiting Room Unit N	STATION MASTER	Over Door
27	" " " "	EMERGENCY ROOM	" "
28	" " " "	FIRE HOSE	
29	North Courtyard	GARAGE	White Paint on Paving

Beranek and Erwin

★

DESIGNERS AND MAKERS OF FINE LIGHTING FIXTURES

January 9 JAN 11
1 9 4 0

Los Angeles Union Passenger Terminal
CONSTRUCTION ENGINEER'S
JAN 11, 1940
OFFICE
LOS ANGELES, CALIF.

L. A. U. P. T.
Attn: Mr. A. J. Barclay
Construction Engineer
726 No. Alameda Street
Los Angeles, California.

Gentlemen:

In compliance with your request we are pleased to confirm our verbal quotation to you covering sign work at the new Passenger Terminal.

We hereby propose to furnish all labor and material for the completion of sign work for the items set forth hereinunder:

Item No. 1: To furnish three Taxicab Signs similar to present sign now in position, except that the background of the sign will be bronze on glass in lieu of cast letters . . . . . $40.00 each

Item No. 2: To change present double-faced Waiting Room sign to read "Taxicab" $38.00

Item No. 3: To remodel present double-faced Taxicab sign with 3½-inch letters $32.00

Item No. 4: To reconstruct present Restaurant Sign with 3½-inch letters and electrify $23.00

The above prices are exclusive to California state sales tax and incandescent lamps, otherwise they are inclusive of all work complete and installation.

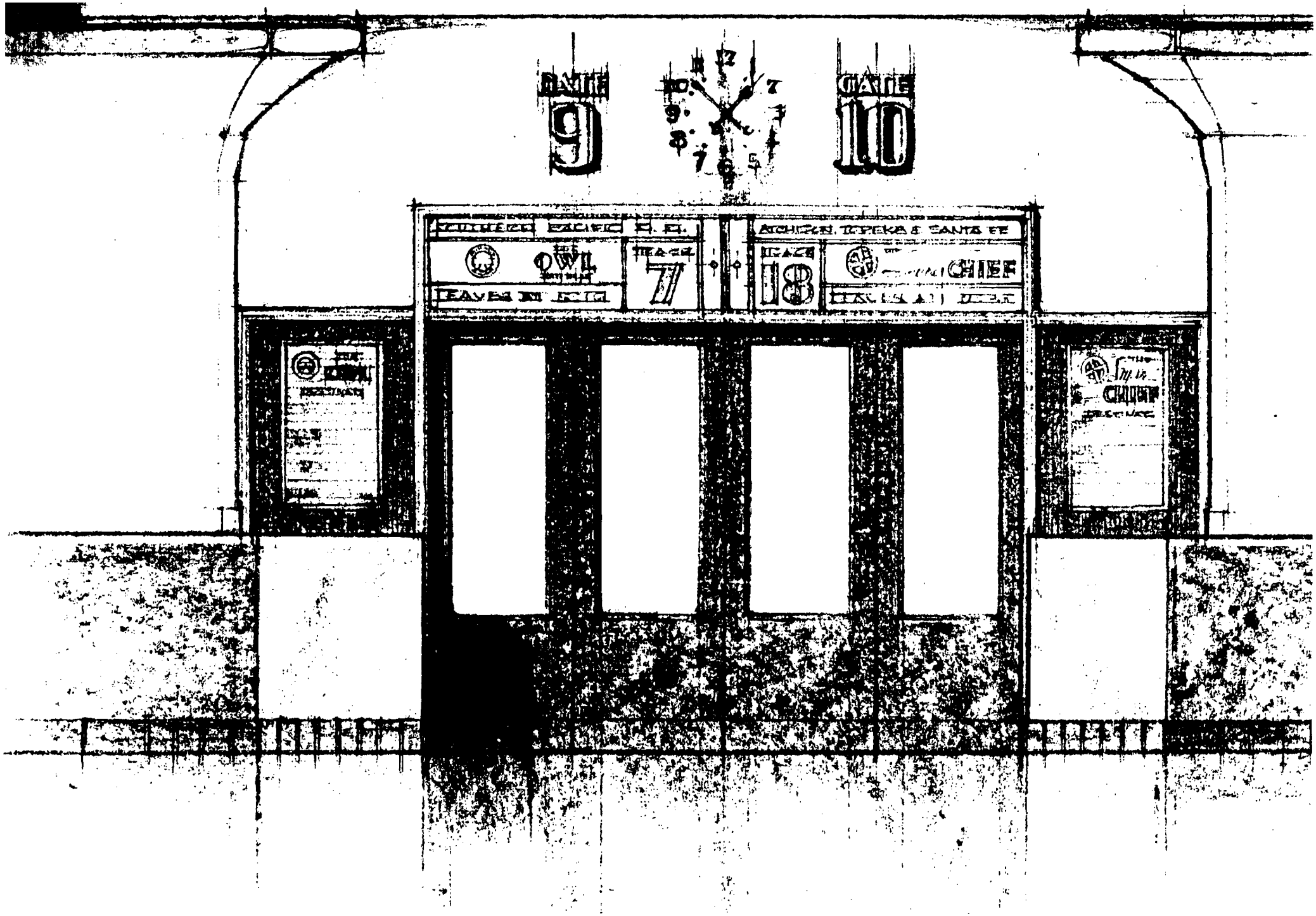
Thanking you for the opportunity of quoting and assuring you of our most prompt attention if awarded this order, we are

Very truly yours

BERANEK and ERWIN

A. L. Erwin.

ALE:h


GATE 9
GATE 10
SOUTHERN PACIFIC R. R.
ATCHISON, TOPEKA & SANTA FE
OWL
TRACK 7
TRACK 18
CHIEF

LOS ANGELES, CALIFORNIA

March 16th, 1939.

MAR 17 1939 OFFICE LOS ANGELES, CALIF.

. A. J. Barclay,
Construction Engineer,
Los Angeles.

MAR 17 1939

ar Sir:

Your letter 7th, file 16-1-2-1, and mine of the
h, anent signs at train gates, LAUPT:

Am attaching four sets of two prints each showing
mes and symbols of Santa Fe trains to be used in signs
er gates and on bulletin boards on the side. The name of
e road, train number and time of departure have not been
own but lettering design should be in keeping with the
le of lettering for the train name and the same character
lettering shown on the side panel. Information to be
aced on bulletin board should be the same as shown on
aim directory board.

There are several short run local Santa Fe trains
ich do not carry names, such as Trains 72 and 78 to San
ego and Trains 42 and 54 to San Bernardino, and these
ould be designated as "San Diego Local" and "San Bernardine
cal", in lieu of last illustrated sign bearing single
rd "Local".

In preparing these signs if there is any further
formation desired, suggest you confer with Mr. Peterson
Mr. Duffy's office.

Yours truly,

W C Blanchard
a

Mr J B Duffy
Mr H P Monahan
Mr R E Drummy
Mr J R Hitchcock
Mr H L Gilman.

MAR 17 1939

3	Passage	1	[illegible]	[illegible]				
4	Main Concourse	1	55.00	55.00	8.00	8.00	63.00	63.00
5	Main Concourse	1	55.00	55.00	22.00	22.00	77.00	77.00
6	Main Concourse	1	55.00	55.00	24.00	24.00	79.00	79.00
7	Main Concourse	1	55.00	55.00	21.00	21.00	76.00	76.00
8	Marquee Main Ent.	1	720.00	720.00			720.00	720.00
9	Ent. Vestibule	1	50.00	50.00	11.00	11.00	61.00	61.00
10	South Arcade	1	114.00	114.00	37.00	37.00	151.00	151.00
11	South Patio	1	46.00	46.00	13.00	13.00	59.00	59.00
14	Vestibule	2	53.00	106.00	12.00	24.00	65.00	130.00
15	Arrival & Depart.	1	54.00	54.00	36.00	36.00	90.00	90.00
16	Reception Room	1	103.00	103.00	Free Standing 72.00	72.00	175.00	175.00
17	Train Concourse	1	120.00	120.00	Free Standing 72.00	72.00	192.00	192.00
18	Passage	1	129.00	129.00	Free Standing 113.00	113.00	242.00	242.00
20	Passenger Sub.	32	44.00	1,408.00	Free Standing 23.00	736.00	67.00	2,144.00
23	Passage	1	48.00	48.00	49.00	49.00	97.00	97.00
24	Passage	1	48.00	48.00	49.00	49.00	97.00	97.00
25	Baggage & Express	1	83.00	83.00	24.00	24.00	107.00	107.00
26	Baggage & Express	1	83.00	83.00	24.00	24.00	107.00	107.00

Schwetzer Bros
19-39

3	Passage	1	55.00	55.00	24.00	24.00	79.00	79.00
4	Main Concourse	1	55.00	55.00	8.00	8.00	63.00	63.00
5	Main Concourse	1	55.00	55.00	22.00	22.00	77.00	77.00
6	Main Concourse	1	55.00	55.00	24.00	24.00	79.00	79.00
7	Main Concourse	1	55.00	55.00	21.00	21.00	76.00	76.00
8	Marquee Main Ent.	1	720.00	720.00			720.00	720.00
9	Ent. Vestibule	1	50.00	50.00	11.00	11.00	61.00	61.00
10	South Arcade	1	114.00	114.00	37.00	37.00	151.00	151.00
11	South Patio	1	46.00	46.00	13.00	13.00	59.00	59.00
14	Vestibule	2	53.00	106.00	12.00	24.00	65.00	130.00
15	Arrival & Depart.	1	54.00	54.00	36.00	36.00	90.00	90.00
16	Reception Room	1	103.00	103.00	Free Standing 72.00	72.00	175.00	175.00
17	Train Concourse	1	120.00	120.00	Free Standing 72.00	72.00	192.00	192.00
18	Passage	1	129.00	129.00	Free Standing 113.00	113.00	242.00	242.00
20	Passenger Sub.	32	44.00	1,408.00	Free Standing 23.00	736.00	67.00	2,144.00
23	Passage	1	48.00	48.00	49.00	49.00	97.00	97.00
24	Passage	1	48.00	48.00	49.00	49.00	97.00	97.00
25	Baggage & Express	1	83.00	83.00	24.00	24.00	107.00	107.00
26	Baggage & Express	1	83.00	83.00	24.00	24.00	107.00	107.00

Schweitzer Bros
19-39

	LOCATION							
30	Soda Fount. Annex.	1	71.00	71.00	65.00 Garage	65.00	136.00	[illegible]
31	Truck Entrance	1	44.00	44.00	10.00	10.00	54.00	54.00
32	Truck Entrance	1	44.00	44.00	12.00	12.00	56.00	56.00
37	North Ramp	2	44.00	88.00	20.00	40.00	64.00	128.00
38	South Ramp	2	44.00	88.00	20.00	40.00	64.00	128.00
39	Restaurant Lobby	1	111.00	111.00	38.00	38.00	149.00	149.00
40	Restaurant Lobby	1	115.00	115.00	58.00	58.00	173.00	173.00
41	Restaurant Lobby	1	111.00	111.00	22.00	22.00	133.00	133.00
42	Train Sheds	32	22.00	704.00	19.00	608.00	41.00	1,312.00
46	Ticket Counter	2	32.00	64.00	13.00	26.00	45.00	90.00
47	Ticket Counter	2	158.00	316.00	32.00	64.00	190.00	380.00
				$5,143.00		$2,342.00		$7,485.00
					LETTERS ONLY			
22	South Patio	1	(On concrete)		25.00	25.00		25.00
33	West Arcade	1	(On concrete)		67.00	67.00		67.00
34	Soda Fount. Annex	1	(On thier glass)		44.00	44.00		44.00
35	South Patio	2	(On thier glass)		50.00	100.00		100.00
36	Passage	1	(On plaster)		34.00	34.00		34.00
43-44	Vestibule Info.Booth	1			410.00	410.00		410.00
45	Main Concourse	1	(On wood partition)		575.00	575.00		575.00
				$5,143.00		$3,597.00		$8,740.00

$200.00 May be deducted for sandblasting.
$150.00 " " " " drilling.

March 6, 1939

File 16-1-2-1

The Frink Corporation
James Hambstock, Western Representative
535 Sacramento Street
San Francisco, California

Gentlemen: Directional Signs

With reference to the directional and informative signs within the building, upon which you submitted a proposal for the glass and lettering.

This has been considered by the Architectural Subcommittee, and they have decided to use a bronze and aluminum letter applied to glass.

We desire to thank you for your proposal, and for the interest of both yourself and Mr. Rees, who has kept closely in touch with this matter, and who furnished samples and demonstrating signs for consideration of the committee.

Yours truly,

SVM:EL

cc - Frink Corporation
1538½ Newton, Los Angeles
Att'n. Mr. Rees

ELECTRICAL PRODUCTS CORPORATION
OF CALIFORNIA
ELECTRICAL ADVERTISING
1128 VENICE BOULEVARD
LOS ANGELES

November 15th, 1938.

nion Terminal
os Angeles, California

entlemen:-

We have carefully considered the problems in connection with the various signs to be installed at the new Union Terminal and are pleased to submit our recommendations covering same.

We have modified the Roman letter design, condensing t slightly, and believe this type of letter ideal for the application. These letters are harmonious and one of the few enduring raditional forms. We recommend that the modified Roman bevelled etter be used on all interior signs with the exception of those here a more rugged type is desired, such as the "BAGGAGE" signs. xtreme care must be taken between the relation of thick and thin trokes as well as on the "cross strokes" of the letters.

We are enclosing with this proposal layouts covering he type of moldings we recommend on the interior signs. The rice schedule attached is an approximate one and may vary 10%, pending on final details.

We recommend fluorescent tube illumination in all hese signs to give even light distribution and to give you the advantage of a minimum number of replacements as well as a considerable aving in operating costs during the life of these displays. The .lumination using Lumiline lamps would be relatively spotty and he total current consumption of these signs approximately 5,100 .tts as compared with 2,150 watts using fluorescent tube illumination. Lamps would burn approximately 1000 hours whereas the life the average tube would be in excess of 5000 hours.

We are giving you a sample showing the effect of e tube illumination as well as the finished letters, both in onze and Pernbrite which is non-tarnishing. The wood molding ction on the sample sign is not the design of molding recommended t, as previously stated, this is covered in the blueprints of r layouts.

We appreciate the opportunity of quoting you on these terior and exterior signs and letters and will be very happy to ve our art or engineering departments co-operate in any further ecifications or designs you might desire.

Very truly yours,

ELECTRICAL PRODUCTS CORPORATION

By Frank Horning

Frank Horning,
Sales Department.

3	WESTERN UNION & TELEPHONE	B	32"	12"	1	2½"	BRONZE	W.I.F.	F.O.	1	PASSAGE	$117.00
4	TO GARAGE	B	32"	12"	1	2½"	"	"	"	1	MAIN CONCOURSE	90.90
5	MENS LOUNGE & BARBER SHOP	B	32"	12"	1	2½"	"	"	"	1	" "	115.50
6	WOMENS LOUNGE & BEAUTY SHOP	B	32"	12"	1	2½"	"	"	"	1	" "	118.90
7	LOS ANGELES STREET CARS	B	32"	12"	1	2½"	"	"	"	1	" "	113.50
8	UNION STATION (SKEL. NON-ILLUM.)	—	73'6"	—	1	21"	"	—	—	1	MARQUISE	593.00
9	GARAGE	E	2'3"	6½"	1	2½"	"	BRONZE	F.O.	1	ENT. VESTIBULE	87.10
10	WAITING ROOM (HANGING FROM CHAINS)	C	5'0"	13½"	2	4"	"	W.I.F.	F.O.	1	SOUTH ARCADE	163.50
11	TAXI	D	2'3"	9"	2	4"	"	"	"	1	SOUTH PATIO	101.10
14	WESTERN UNION	A	32"	8½"	1	2½"	"	"	"	1	VESTIBULE	97.50
14	TELEPHONES	A	32"	8½"	1	2½"	"	"	"	1	"	109.50
15	BAGGAGE (MOD. LETTERS)	G	5'6"	9"	1	6"	ALUMIN.	ALUMIN.	—	1	ARR. & DEP.	96.00
16	TELEPHONE & TAXI (MOD. LETTERS)	G	12'3"	9"	1	6"	"	"	—	1	RECEPTION ROOM	171.50
17	BAGGAGE COUNTER " "	H	11'9"	12"	1	6"	"	"	ALUMIN.	1	TRAIN CONCOURSE	170.50
18	BAGGAGE ROOM & TRAIN CONCOURSE	G	17'0"	7"	1	4"	OLDS.	"	—	1	PASSAGE	170.00
20	TRACK 1 (ETC)	I	19"	15"	2	2"/7½"	ALUMIN.	"	ALUMIN.	32	PASSAGE SUBWAY	1640.00
22	WAITING ROOM (ON CONCRETE)	J	—	—	—	4"	BRONZE	—	—	1	SOUTH PATIO	77.50
23	NEWS STAND & SODA FOUNTAIN	F	20"	7-3/4"	2	2"	"	C.I.F.	F.O.	1	PASSAGE	129.70
24	PARCEL CHECK & COAT ROOM	F	20"	7-3/4"	2	2"	"	"	"	1	"	122.30
25	BAGGAGE ROOM	K	5'3"	12"	1	4"	ALUMIN.	ALUMIN.	"	1	BAG. EXP. LINE	110.00
26	BAGGAGE ROOM	K	5'3"	12"	1	4"	"	"	"	1	" " "	110.00
30	GARAGE (ON CONCRETE)	J	—	—	—	10"	BRONZE	—	—	1	SODA FOUNT. ANNEX	132.50
31	GARAGE	D	3'0"	9"	1	2½"	"	W.I.F.	F.O.	2	TRUCK ENTRANCE	83.00
32	BAGGAGE	D	3'0"	9"	1	2½"	"	"	"	1	" "	84.95
33	TERMINAL OFFICES PULLMAN OFFICES	J	—	—	—	4"	"	—	—	1	WEST ARCADE	167.00
34	SODA FOUNTAIN CIGARS CANDY (GLASS)	J	—	—	—	2½"	"	—	—	1	SODA FOUNT. ANNEX	149.50
35	PARCEL CHECK ROOM (ON GLASS)	J	—	—	—	4"	"	—	—	2	SOUTH PATIO	219.05
36	PARCEL CHECK ROOM (ON PLASTER)	J	—	—	—	4"	"	—	—	1	PASSAGE	97.50
37	BAGGAGE EXPRESS	D	3'6"	9"	2	4"	"	W.I.F.	F.O.	2	NORTH RAMP	191.50
38	BAGGAGE EXPRESS	D	3'6"	9"	2	4"	"	"	"	2	SOUTH RAMP	191.50
39	INTERURBAN STREETCARS — LOS ANGELES STREETCARS (SUSPENDED)	A	5'6"	8½"	2	2½"	"	"	"	1	RESTAURANT LOBBY	171.00
40	INTERURBAN STREETCARS — LOS ANGELES STREETCARS	A	5'6"	8½"	"	2½"	"	"	"	1	" "	171.00
41	ALAMEDA STREET RESTAURANT	A	5'6"	8½"	2	2½"	"	"	"	1	" "	138.50
42	TRACK 1 (ETC)	L	15"	14"	2	2"/7½"	ALUMIN.	ALUMIN.	ALUMIN.	32	TRAIN SHEDS	952.00
43	INFORMATION (ON BOOTH)	M	10'3"	10"	2	4"	BRONZE	BRONZE	F.O.	2	VESTIBULE	193.00
43	INFORMATION (ON BOOTH)	M	5'5"	10"	2	4"	"	"	"	2	"	140.70
44	WAITING ROOM — ARROW (ON BOOTH)	M	24"	10"	1	2½"	"	"	"	4	"	171.50
44	TO TRAINS — ARROW (ON BOOTH)	M	24"	10"	1	2½"	"	"	"	4	"	149.00
44	TICKETS — ARROW (ON BOOTH)	M	24"	10"	1	2½"	"	"	"	4	"	141.50
44	RESTAURANT — ARROW (ON BOOTH)	M	24"	10"	1	2½"	"	"	"	4	"	165.00
45	SOUTHERN PACIFIC (TICKET COUNTER)	N	—	—	—	10"	"	—	—	1	MAIN CONCOURSE	296.50
45	SANTA FE (TICKET COUNTER)	N	—	—	—	10"	"	—	—	1	" "	150.50
45	UNION PACIFIC (TICKET COUNTER)	N	—	—	—	10"	"	—	—	1	" "	242.50
46	TICKETS (TICKET COUNTER)	A	2'9"	13½"	1	4"	"	BRONZE	F.O.	2	" "	134.50
47	SANTA FE (GLASS BACKGROUND)	O	18½"	6½"	1	2"	"	"	"	1	" "	53.70
47	UNION PACIFIC (GLASS BACKGROUND)	O	18½"	6½"	1	2"	"	"	"	2	" "	103.75
47	SOUTHERN PACIFIC (GLASS BACKGROUND)	O	18½"	6½"	1	2"	"	"	"	1	" "	68.60
	INFORMATION BOOTH											2,006.00
												$11,271.15

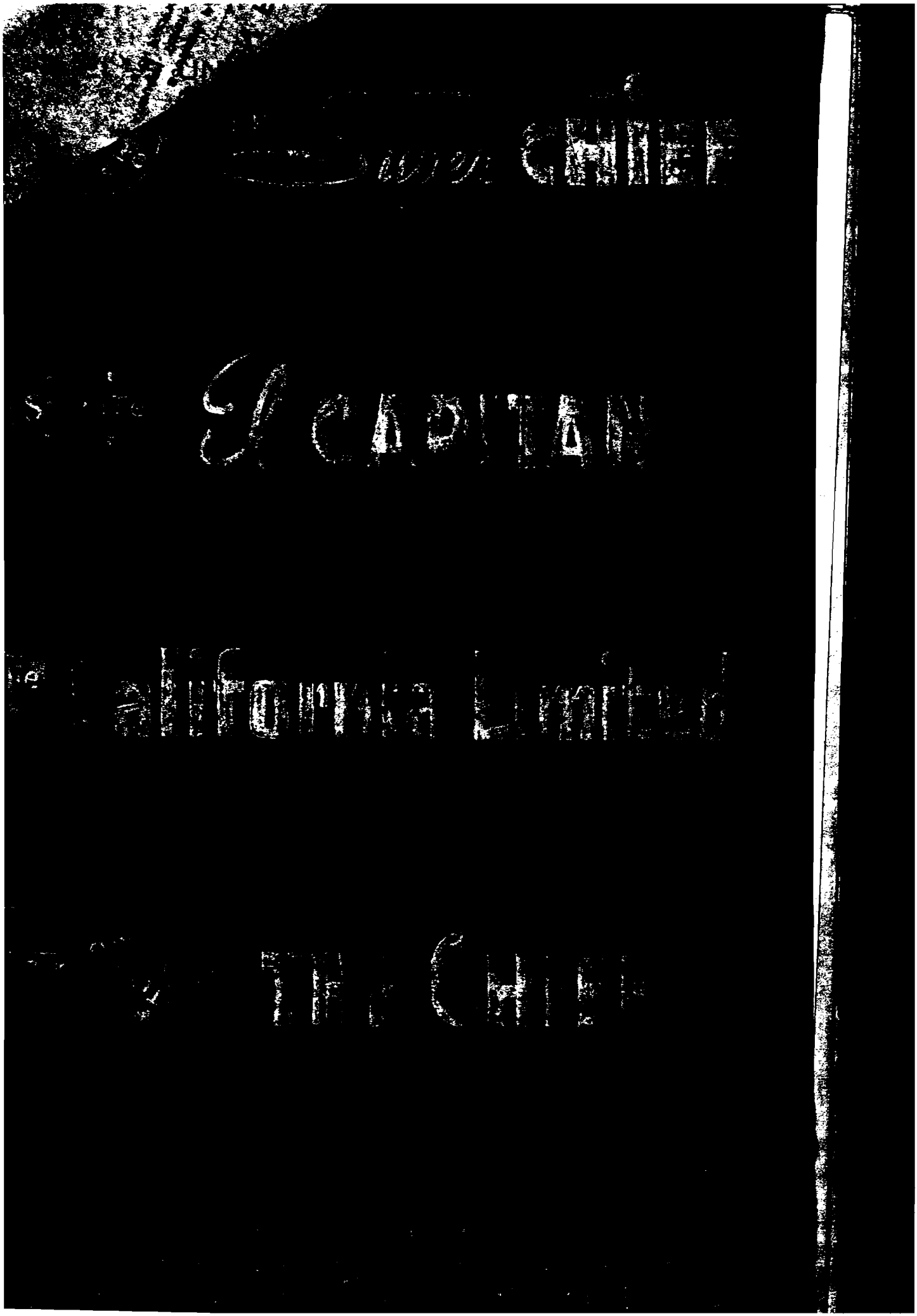
Tib 16-13

KABEL

ABCDEF GHIJKLN MOPQRS TUVWXYZ

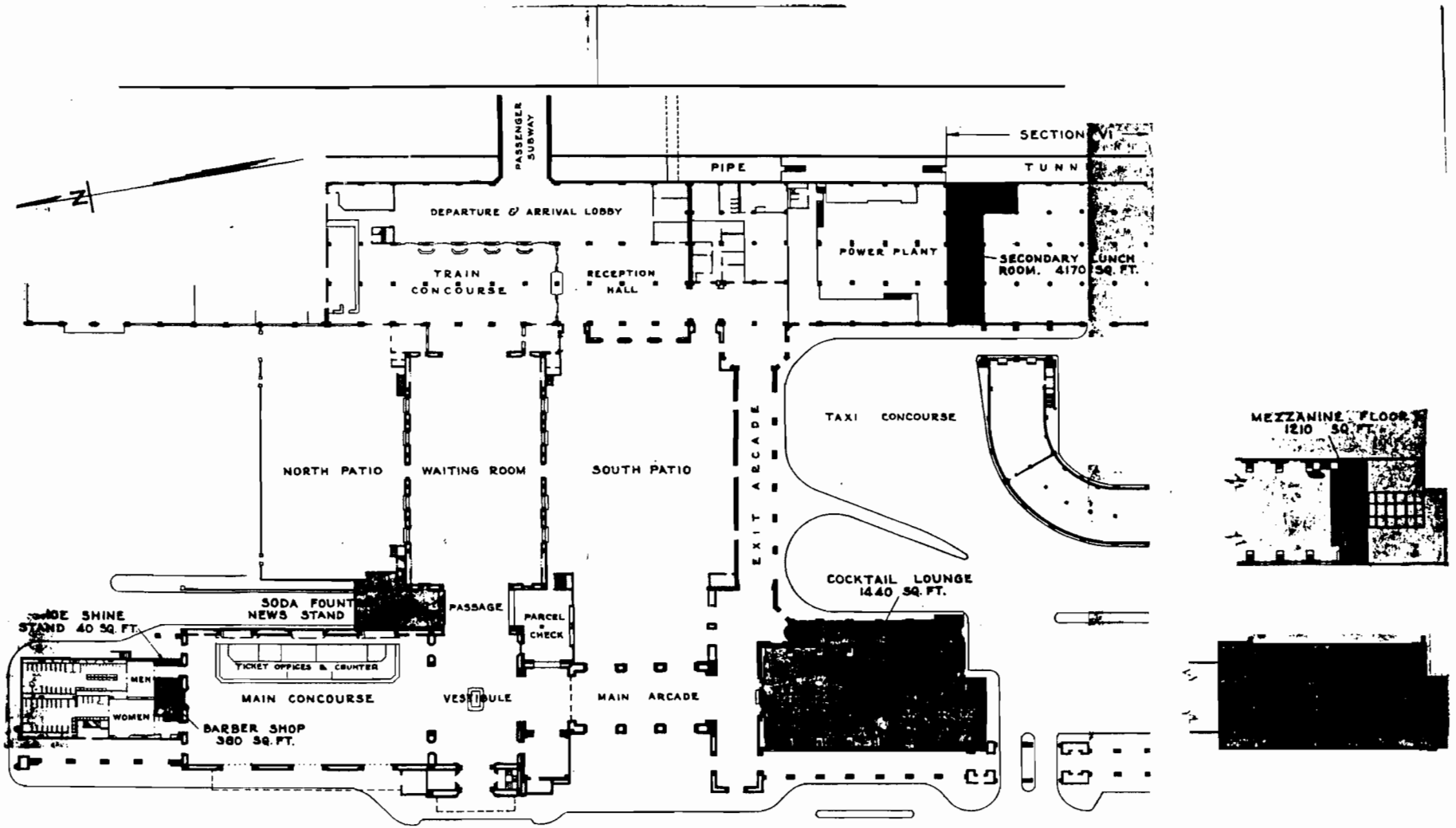
F. A. [illegible]
E. E. McCarty
A. E. Meyer
A. J. Barclay

COPY


CHIEF
CAPTAIN
alifornia Limited
The Chief

[redacted]

E. FRED HARVEY FACILITIES



PLAN
SCALE - 1" TO 50'

LOS ANGELES UNION PASSENGER TERMINAL

EXHIBIT "A"

TO ACCOMPANY AGREEMENT
BETWEEN
THE ATCHISON, TOPEKA, AND SANTA FE RAILWAY COMPAN
SOUTHERN PACIFIC COMPANY
LOS ANGELES AND SALT LAKE RAILROAD COMPANY
(UNION PACIFIC RAILROAD COMPANY, LESSEE)
AND
FRED HARVEY

LOS ANGELES, CALIF.
JAN. 3, 1939

SCALE: AS NOTED
DRAWING NO. 411

- NOTE -

AREAS COVERED BY CONTRACT AGREEMENT SHOWN TINTED RED.

RESTAURANT	4200 SQ. FT.	COCKTAIL LOUNGE	1440 SQ. FT.
KITCHEN	3760 " "	SODA FOUNTAIN - NEWS STAND	1450 " "
MEZZANINE FLOOR (INCL. BALCONY)	1210 " "	BARBER SHOP	380 " "
BASEMENT	8500 " "	SHOE SHINE STAND	40 " "
SECONDARY LUNCH ROOM (SEC. VI)	4170 " "	GRAND TOTAL	25,150 SQ. FT.

...L OFFICE
...N STATION
...AS CITY, MO.

Fred Harvey
2146 East 7th. St.
Los Angeles, California

TRINITY 0611

September 7, 1939

SEP -8 1939

Mr. J. A. Barclay, Chief Engineer of Construction
Los Angeles Union Passenger Terminal
800 North Alameda Street
Los Angeles, California

Dear Sir:

Referring to the question of Cocktail Lounge Gates for use at the new Union Station, a matter which I believe you have been following up through our Mr. McCreary.

I now have advice from Miss Colter, asking if she can see a plan of what is proposed before they are decided on as she is interested in seeing something fitted in there that will match the rest of the surroundings.

If you have anything available that I might send to her, will appreciate hearing from you and very much oblige

Yours truly,

GHR:JT

May 18, 1939

Mr.Barclay:

Fred Harvey Contract

The fixed appliances to be supplied and maintained by the Terminal as herein provided shall be of the following general character:

Refrigerator boxes ✓

Compressors and motors

Service outlet connections

Bancos or booths - in Soda Fountain Room only. 5/18

Counters

Sinks

Pantry work board and shelving

Dumb-waiter collector stand

Hoods, ducts, fans and motors

Soda Fountain

Carbonator back bar

Buffet bar

Cutting boards, partitions

Cigar display cases

Magazine Display Counter and rack

Mirrors

Lavatories

Light fixtures

Railings

And all necessary equipment of like character.

The movable furniture and the equipment to be supplied and maintained by service company at its expense shall be of the following general character:

Kitchen equipment

Ranges

Steam tables

Cooking utensils of all descriptions

Tables

Tables in bancos or booths

Hat racks and chairs

Cash register

Silverware

Glassware

Linen

China

And all necessary equipment of like character.

E. W. Olson

Received by telephone call 3:00 P. M.
EWO:PP

STATEMENT

Fred Harvey

GENERAL OFFICE
1701 RAILWAY EXCHANGE
CHICAGO, ILL.

LOS ANGELES UNION PASSENGER TERMI NAL

1

DATE APR 30 1939

H AND RETURN WITH YOUR CHECK PAID $

FRED HARVEY, CHICAGO, ILL.

VOICE NO.	SHIPPED FROM	ITEM	CHARGES	CREDIT	BALANCE
373	DOHRMANN HOTEL	GARBAGE			
	SUPPLY CO	ASSORT TABLE	46 35		
372	"	BUTCHER SINKS			
		POT SINKS &			
		SHELF			
		SILV WORKERS			
		SINK			
		VEG PREP SINKS			
		COOKS SINK			
		PASTRY MANS SINK			
		BAKE SHOP SINK			
			1760 57		
371	FRIGIDAIRE CO	1 WF-375 H COMP			
		60 CYC			
		3 TEV-18 VALVES			
		1 ERV-20 VALVE	332 63		
370	HOPF & SON CO	12 PEACH GLASS			
		MIRRORS			
		BACK BAR FIX			
		GLASS INSTALLED			
		PRIVATE D ROOM	761 40		
369	HOPF & SON CO	PLATE INSIDE			
		DOOR			
		½"CRYSTAL GLASS			
		COCKTAIL LGE	197 96		3098 91★

and rack

STATEMENT

Fred Harvey

GENERAL OFFICE
1701 RAILWAY EXCHANGE
CHICAGO, ILL.

LOS ANGELES UNION PASSENGER TERMI NAL

1

DATE APR 3 0 1939

H AND RETURN WITH YOUR CHECK PAID $_____

FRED HARVEY, CHICAGO, ILL.

VOICE NO.	SHIPPED FROM	ITEM	CHARGES	CREDIT	BALANCE	
373	DOHRMANN HOTEL	GARBAGE				
	SUPPLY CO	ASSORT TABLE	46 35	✓ ✓ Hou # 7186		
372	"	BUTCHER SINKS ✓				
		POT S I NKS & ✓				
		SHELF ✓				
		SILV WORKERS ✓				
		SINK ✓				
		VEG PREP SINKS ✓				
		COOKS SINK ✓				
		PASTRY MANS SINK ✓				
		BAKE SHOP SINK ✓				
			1760 57	✓ Hou 7185		
371	ERIGIDAIRE CO	1 WF-375 H COMP ✓				
		60 CYC ✓				
		3 TEV-18 VALVES ✓				
		1 ERV-20 VALVE	332 63	✓ -	7181	and rack
370	HOPF & SON CO	12 PEACH GLASS				
		MIRRORS				
		BACK BAR FIX				
		GLASS INSTALLED				
		PRIVATE D ROOM	761 40	-		
369	HOPF & SON CO	PLATE INSIDE				
		DOOR				
		½"CRYSTAL GLASS		Hou 7182		
		COCKTAIL LGE	197 96		3098 91*	

CHAS. V. STEGNER GEORGE R. V. STEGNER

STEGNER and SONS
3001 E. ELEVENTH STREET • ANgelus 12161
LOS ANGELES, CALIFORNIA

Manufacturers
CABINET WORK • STORE FIXTURES
FINE RESIDENCE INTERIORS

24-2

April 25, 1939.

L.A. Union Passenger Terminal
Engineering Department
Los Angeles, California.

Attention - Mr. W. Haedohm

Gentlemen:

As per your instructions, we are going ahead with the linoleum base on the walls and columns of the Cocktail Room. We are planning to cement the base to the plaster walls and columns, bevelling the top edge slightly. The base will be rose colored to match that now on booths. Black base will be used on either side of archway to Dining Room as requested by Miss Coulter.

This work was not in our original contract, therefore we discussed this point with you and it will be charged as an extra, based on time and material consumed.

In the News Section we were requested to change the cylinder lock on entrance doors so as to conform with those in other sections of the depot. This was not originally requested and therefore will bear a slight extra charge to make this change. We are going ahead as requested by Mr. Rowe.

Thanking you for your attention in this matter, we remain

Yours very truly,

CHAS. V. STEGNER & SONS

Wesley G. Bauer

Wesley G. Bauer

WGB:ks

[redacted]RANCISCO

[redacted]d Carbonic Pacific Corporation Ltd.

GENERAL OFFICE AND FACTORY, LOS ANGELES, CALIF.

2600 E. TWELFTH STREET
LOS ANGELES

April 18, 1939.

Los Angeles Union Passenger Terminal,
Engineering Department,
726 N. Alameda Street,
Los Angeles, Calif.

Attention Mr. A. J. Barclay,
Construction Engineer.

Gentlemen:

Please refer to our letter of April 3rd wherein we advised you of the type of coil being used in the center display and service units which we are making for installation in the area occupied by the counter of the restaurant in the Fred Harvey operation. We advised you coil that would be used in the 4'0" center case, the service unit of these three cases, would be a Flow-Cold. Instead, we have decided to use a Spasaver Coil, as manufactured by Dreyer & Hansen. We have discussed this with the Baker Refrigeration Co. and advised them of the change we were making, and they have verbally advised us that this would be perfectly satisfactory to them. For your information, the Spasaver Coil operates the same as a Flow-Cold, but occupies a little less space, and for this particular unit, will give better results, we sincerely believe.

Very truly yours,
THE LIQUID CARBONIC PACIFIC CORP. LTD.

M. E. Berger

Branch Manager.

MEBerger/mel
cc - C.F.Anderson

PETERSEN SHOW CASE
and FIXTURE CO., INC.
BANK « STORE « OFFICE FIXTURES
HENRY S. PETERSEN, PRESIDENT
HOWARD S. PETERSEN, SECRETARY
LOS ANGELES
ADams 326

April 3, 1939

Santa Fe Railway Co.
733 Kerkoff Building
Los Angeles, Calif.

Attention: Mr. McCreay

We propose to furnish and install fixtures for the Employees Lunch Room for Fred Harvey at the Los Angeles Union Passenger Terminal for the sum of Two Thousand Nine Hundred Ninety Two Dollars ($2992.00) plus California State Sales Tax of Eighty One Dollars Eighty Seven Cents ($81.87).

Very truly yours,

PETERSEN SHOW CASE & FIXTURE CO., INC.

Henry S. Petersen

Henry S. Petersen
President

HSP:l

3 Weeks delivery

2992.00
Compressor 115.00
Carbonator 156.00
3263.00

Bert Manufacturing Company, Ltd.

2239 Cros Street - - Phone CApitol 4194
Los Angeles, California

24-

March 28, 1939

MAR 28 1939

A. J. Barclay
on Passenger Terminal
Angeles, Calif.

ar Sir:- Re:- Entrance to Cocktail Room
Fred Harvey Concession.

We hand you here-with four prints of each our or detail sheets 1, 2 and 3 which we submit for approval or correction.

We have discussed this detail with Miss Colter and at her request we have eliminated certain muntins for the glass.

We have also indicated dimentions other than that shown on architects details which we are advised are to be followed.

All material indicated to be brass copper plated will be furnished in solid copper in natural finish in accordance with sample we will submit for approval.

Yours very truly,

EHP:OL

ProBert Mfg. Co.

E. H. Probert

MAR 28 1939

Prints checked & returned 3/28/39

PETERSEN SHOW CASE and FIXTURE CO., INC.
BANK « STORE « OFFICE FIXTURES

HENRY S. PETERSEN, PRESIDENT
HOWARD S. PETERSEN, SECRETARY

March 16, 1939

Los Angeles Union Passenger Terminal
726 North Alameda Street
Los Angeles, California

Attention: Mr. A. J. Barclay

Re: Fred Harvey Facilities

Gentlemen:

We propose to furnish and install cabinet and wood work as follows for dining room--

All wood work for private dining room of cocktail lounge wood to be birch not painted for the sum of One Thousand Four Dollars ($1004.00) plus tax of Twenty Five Dollars Twenty Cents ($25.20). All Wood Wainscote and 2 enclosures with service stand and dumb waiter trim for mezzanine floor wood to be white pine not painted for the sum of One Thousand Eighty Dollars ($1080.00) plus Tax of Twenty Seven Dollars Thirty Five Cents ($27.35).

This quotation does not include the bent front center service unit and enclosure.

Very truly yours,

PETERSEN SHOW CASE & FIXTURE CO., INC.

Howard S. Petersen
Howard S. Petersen
Secretary

HSP:l

cc: Mr. Gilman

[redacted]senger Terminal.

Los Angeles, March 14th, 1939.

1991

Mr. A. J. Barclay,

Superintendent Construction LAUPT,

Los Angeles, California.

Dear Sir:

For your information and further handling, I am attaching five copies of a list which outline in detail the work to be done by the Terminal and Fred Harvey in the Kitchen, Basement, Restaurant, Mezzanine, Cocktail Lounge and Private Room, Soda Fountain and News Stand and Barber Shop.

Please understand the financial responsibility for this work will be determined by the contract between Fred Harvey and the Passenger Terminal organization.

If there are any corrections or changes to be made in this list, please notify me at an early date.

Yours truly,

H. L. Gilman

cc to J C Blanchard
Mr M E J Colter
Mr J McCreary

FRED HARVEY FACILITIES
LOS ANGELES UNION PASSENGER TERMINAL

WORK TO BE DONE

KITCHEN

(a) By Terminal

1. Elevator and two dumbwaiters
2. Sink and drain in janitors closet
3. All built-up refrigerators
4. Canopies over ranges and soup kettles
5. All ventilation work including exhaust over dishwashing equipment.
6. Rough plumbing, floor drains and sinks
7. All connections between rough plumbing and kitchen equi ment.
8. Tile floor and wainscot, also concrete curbs.
9. Acoustical treatment on walls, etc
10. Painting
11. Doors and hardware
12. Electrical work including commercial light fixtures
13. Clock

(b) By Fred Harvey

1. Standard and special kitchen equipment.

BASEMENT

(a) By Terminal

1. All work shown on basement plan, except that listed by Fred Harvey.

(b) By Fred Harvey

1. Work table in ice cream room
2. Desks in office and drug room
3. All metal lockers in toilets & locker rooms
4. All mirrors

7. Cup and roll warmer in niche between restaurant and kitchen.
8. Glass in high windows
9. Carpet on raised banco areas
10. Stainless steel and copper work in two water units.
11. Copper and stainless steel above roll warmers

PLANING

(a) By Terminal

1. All plastering work
2. Subfloor under carpet
3. Tile floor and base on balcony
4. Acoustical work
5. Electrical work including lighting fixtures by Bell
6. Rough carpenter work behind cabinet work.
7. All painting and wood finishing
8. All ventilation work
9. Rough plumbing and hookup to service unit
10. Linoleum floor at dumbwainters and back of service unit

(b) By Fred Harvey

1. Carpet on floor
2. All wood cabinet work, also including woodwork on walls.
3. Tables and chairs
4. Service unit including sinks. etc.

COCKTAIL LOUNGE AND PRIVATE ROOM

(a) By Terminal

1. All metal lath and carpenter work
2. Acoustical work

3. All electrical work including concealed lighting and special lighting fixtures by Bell. Also reflector lighting on outside of south window of private room.

4. All painting except finishing of bancos, bar, stools and tables.

5. All ventilation and air conditioning work.

6. Door with hardware to men's toilet.

7. Main entrance door with hardware and special treatment between Arcade and Cocktail Lounge.

8. Lino base

9. Backing for mirrors

10. All rough plumbing including hookup to bar equipment.

11. All work in men's toilet and entry to same.

(a) By Fred Harvey

1. Bar and Back bar complete, including mirrors and bottle display.

2. All bancos, tables, stools.

3. Mirrors over bancos

4. All cabinet work in private room including wood base, panel work and all wood work around serving tables.

5. White pine sash, redwood sill and wood trim for south window in private room. See sheet 10.

6. Glass in south window and grille

7.

SODA FOUNTAIN AND NEWS STAND

(a) By Terminal

1. Marble and tile floors and wainscot

2. All metal lath and plaster work

3. All electrical work including commercial lighting fixtures.

4. All work in connection with soda fountain, back bar, upholstered bench stock room and dishwashing room.

5. All work in connection with news stand cases, counters show windows an doors.

6. Toilet room complete

7. All rough plumbing including hookup to all fixtures.

(b) By Fred Harvey

1. Three tables, four chairs and nineteen stools.

BARBER SH.

(a) By Terminal

1. All work shown on drawing, plans and details of barber shop, except barber chairs, table and chairs and cash register.

(b) By Fred Harvey

1. Barber chairs

2. Table and two chairs

3. Cash register and stand for same.

[illegible]
3-1[illegible]-3[illegible]

February [illegible]

Liquid Carbonic Pacific Corporation, Ltd.
2600 [illegible] 12th Street
Los Angeles, California

Soda Fountain Luncheonette

Gentlemen: Attention: Mr. H. E. Berger

Please be referred to your proposal, dated February 13, 1939, for soda fountain luncheonette to be built on these premises, which was addressed to Mr. [illegible] McCreary of Fred Harvey.

This is to advise you that the above-named proposal has been accepted, and this will be your authority to proceed with the work.

It is anticipated that everything will be installed in the Terminal buildings on or before March 31st. Anything you can do to expedite your portion of the work will be appreciated.

A regular form of Letter Agreement will follow. It is assured that anything omitted by request will be credited in the amount itemized, anything added will be paid for as an extra at an agreed price.

If at anytime anything stands in the way of your making progress, I will appreciate it if you will call it to my attention immediately.

Yours truly,

CC - Messrs:

M. C. Blanchard
H. L. Gilman

AJB:FF

Los Angeles, January 31st, 1939

1991

Fred Harvey Restaurant
Facilities- Union Station.

Mr A J Barclay,

Construction Engineer, LAUPT,

Los Angeles, Calif.

Dear Sir:

Attached are three blueprints of cross section area dated January 4th, 1939, which indicate the radiuses to be used in laying out the arch section.

This drawing together with the tracings handed you Saturday make up the Architectural drawings detailed by Fred Harvey for the restaurant area.

Please mark up one set of blueprints with any corrections or changes you have in mind and send to me at your earliest convenience so that the matter may be handled further with the Fred Harvey Company.

Yours truly,

H. L. Gilman

SOUTHERN PACIFIC COMPANY
THE ATCHISON, TOPEKA AND SANTA FE RAILWAY CO.
UNION PACIFIC RAILROAD COMPANY

LOS ANGELES, CALIFORNIA

January 26th, 1939.
LAUPT

Mr. A. J. Barclay,
Construction Engineer,
Los Angeles.

Dear Sir:

Referring to the Fred Harvey requirements in the restaurant and kitchen in the new union station:

On Saturday, January 21st, you received by mail a print showing the lunch counter and kitchen equipment dated December 12, 1938, also a kitchen mechanical plan drawn by Dohrmann Hotel Supply Company dated January 7, 1939. These prints show enough data that the plumbing plans may be completed.

It is proposed to use the following floor coverings -

(a) Manager and clerical office - linoleum on cement base.

(b) Entire kitchen help dining room and bake shop - 9" x 9" Parkersburg or equal quarry tile with 9" cove base of same material.

The partitions around office and toilets should extend to ceiling which is the underside of the mezzanine floor. The partition between bake shop and kitchen should be same height as the refrigerator, or 8-ft.

All exposed walls, columns and partitions in the kitchen, help dining room and bake shop to have tile wainscot 8-ft high, using Gladding McBean Hermosa Mammoth Tile, size 12" x 6", color AH-122.

The details for tile floor and wainscot and marble partitions for toilets to be furnished at an early date.

JAN 30 1939

2-1-39

[redacted]

Mr. Barclay - #2

Mr. McCreary, Fred Harvey representative, is available to answer questions and explain details on the kitchen layouts at Santa Fe phone No. 444.

Yours truly,

A. C. Bauhard

[redacted]

LOS ANGELES UNION PASSENGER TERMINAL
ENGINEERING DEPARTMENT

AY
GINEER

726 NORTH ALAMEDA STREET
LOS ANGELES, CALIFORNIA

S. V. NEIGE
ASST. CONSTRUCTION ENGINEER

July 27, 1938 File 24

Mr. M. C. Blanchard, Chairman
Engineering Committee, LAUPT
Los Angeles, California

Dear Sir: Concessions

Complying with your verbal request, I am attaching estimate of cost of furnishing the concessions. This estimate is based on a grade of fixture in keeping with the appointments of the depot. The costs indicate the minimum that should be spent to preserve the continuity of the appointments and appearance of the station building, but not the irreducible minimum; neither do they represent the maximum sums which could be spent with effect and advantage, and are naturally a matter of opinion with as much comparison of costs of actual installation as possible. A close estimate, based on definite plans and bills of material would probably require 30 days to compile and properly price.

There is no provision in the estimate for the $99000.00 It would have to come out of the $250,000 general contingencies assuming that this fund is not too seriously drawn upon.

The estimate provides $50,000 for finish in the restaurant and kitchen, which must cover plastering, accustical work, floors, painting and decorating, etc.

Yours truly,

SVM/DB

(Signed) A. J. BARCLAY

Enc.

Estimated Cost of Fixtures

ntain		
Back Bar	$ 1500.00	
Counter	2000.00	
Fountain	1500.00	
Show Cases, Cashier	750.00	$ 5750.00
ws Stand		
Back Cases	500.00	
Counter	750.00	
Show Cases, etc.	1000.00	2250.00
untain Kitchen		
Sinks, etc.	250.00	
Range hoods, etc.	650.00	
Steam tables, etc.	750.00	
Ventilation incl. ducts	750.00	2400.00
rber Shop		
Back bar & Mirrors	450.00	
Plumbing Fixtures	200.00	
Ventilation (air cooling unit)	250.00	900.00
ing Room		
Cashiers' Counter	1000.00	
Booths	7000.00	
Lunch counter & Stools	10600.00	
Cocktail Bar & Stools	15000.00	33600.00
Kitchen		
Including all equipment, ventilation, ice boxes, air conditioning for restaurant, but not including laundry equipment	40000.00	
Basement		
Including refrigerating machinery, ice boxes, racks, bins & shelving	15000.00	
provided for in estimate		
[illegible]		

F. CEILING MURALS

HERMAN · SACHS
1611 EDGECLIFFE · DRIVE
LOS · ANGELES · - · CALIF ·
PHONE: - [redacted] 7000

September 20th - - - 1938

SEP 22 1938

9/22/38

Mr. H.L. Gilman, Chairman
Architectural Committee, L.A.U.P.T.
Kerckhoff Building
Los Angeles, California

Dear Mr. Gilman:

I herewith include the specification for the painting and decorating of the waiting room of the L.A.U.P.T.

I have described the work in a manner as if I were to perform it myself. In spite of the accurate sketch and description of the process of the work you will still need a capable and responsible contractor with a well trained, harmonious crew, who is without any theatricalism, and a certain amount of experimental work on the building in order to get results.

Very truly yours,

Herman Sachs

HERMAN · SACHS
1611 EDGECLIFFE · DRIVE
LOS · ANGELES · - · CALIF ·
PHONE: - [illegible] - - - 1-7000

SEP 22 [illegible]

September 20th - - 1938

SPECIFICATIONS FOR PAINTING AND DECORATING WAITING ROOM

LOS ANGELES UNION PASSENGER TERMINAL
LOS ANGELES, CALIFORNIA

Southern Pacific Company
Atchison Topeka & Santa Fe Railway Company
Union Pacific Railroad Company

G.H. Christie, Architect
H.L. Gilman, Architect
R.J. Wirth, Architect

PREPARATORY WORK

Acoustic-Celotex

First Coat: (priming)
Consisting of a sealer to contain filtex, (Pratt & Lambert), boiled linseed oil, white lead, turpentine, and Japan drier, according to the directions of the manufacturer. Color to be white.

Second Coat:
Dutch Boy flat wall paint or Benjamin Moore Sani-flat paint with sufficient mixing colors to form a desired undertone for the decoration.

Third Coat:
Consisting of the above ingredients with a small per cent of mineral whitening and to form sufficient texture, color to be complimentary in tone to the decoration. This coat is to be stippled wherever texture is necessary to add to the effect of the decorating.

Plaster Surfaces
All preparatory work is to be treated like above 1st, 2nd, and 3rd coats.

All work is to be done by brush. Contractor can submit a sample for the undercoat. If accepted, he will get a written order to carry on the work. Otherwise all work is to be done by brush.

applied by air brush.

DECORATING PROCESS

Design: Design and color to be like sketches 1, 2, and 3.

Materials: Benjamin Moore Sani-flat for the body tone and 4% added Danish whitening and 3½% mineral white dry (for flattening purposes) and John W. Masury mixing colors.

Application: After the design has been enlarged and transferred to the surfaces shown in the sketches, the decorative motifs will be built up in layers with semi-opaque colors in complimentary tones according to the sketches.

In order to get the atmospheric effect produced in the sketches and also to find out if the form and colors carry the proper distance (which can only be determined on the building) the number of coats and undercoats of the motifs will be determined by trying out on the job.

In order to accomplish a mellow harmony as indicated in sketches and similar to the old masters so that the work does not look harsh, the decorative work will be built up on complimentary undertones.

All work is to be done by hand with the exception of those surfaces where architectural correctness is essential and which may be advisable to do by stencil.

The decorating contractor will paint the samples on the ceiling sufficient to show the effect of the work in the process of application. After such samples have been approved by the architectural committee and company's representative the contractor will be given a written order to proceed with 75% of the work. When 75% of the work is almost completed he must apply for permission to paint over the original samples. This is necessary in all first class work in order to assure uniformity.

In order to accomplish harmonious results any changes of color or form, adding to or taking out of forms indicated in the sketches in order to express the sketches, are part of this contract without any extras.

The decorating when finished is to be a perfect mat finish (no shiners).

APPROVAL — All work is to be done with the approval of the architectural committee and company's representative.

MATERIALS — All oils, turpentine, white lead, zinc white, filtex, and sealers are to be of high standard quality. Masury mixing colors are to be used.

TECHNICAL SUPERVISION — All technical work will be under the supervision of the building superintendent.

PRICE

TIME OF EXECUTION

932230/340(4)

LOS ANGELES UNION PASSENGER TERMINAL

SOUTHERN PACIFIC COMPANY
THE ATCHISON, TOPEKA AND SANTA FE RAILWAY CO.
UNION PACIFIC RAILROAD COMPANY

LOS ANGELES, CALIFORNIA Sept. 26, 1938...

H.L. Gilman, Architect,
A.T. & S.F. Ry Co.,
Angeles, Calif.

R. J. Wirth, Architect,
on Pacific System,
Angeles, Calif.

SEP 27 1938

r Sirs:-

SUBJECT: Decorating, LAUPT.

After I receive photograph of the drawing submitted Mr Herman Sachs for the panel ceiling in Waiting Room, I will e it further study. My first impression upon viewing the ored drawing, was one of disappointment.

As stated before, it would be a better plan if Mr Sachs perated with us as a Committee and divulged his motifs and as before he finishes his study complete and which would not n be subject to change. It will be a case of "take it or leave .

May I request that any future studies of his be submitted the Committee progressively, from week to week.

With reference to specifications for this work mitted by Mr Sachs, have the following comments;-

PARATORY WORK:
First Coat. Second Coat. Third Coat.

Each of these paragraphs should contain the words- "or equal".

Plaster Surfaces:

Wording is not clear.

ORATING PROCESS:
Materials: add "or equal."

Application:
1st paragraph:- No comments.

2nd " "In order to get atmospheric effect produced in sketches and also find out if form and colors carry proper distance (which can only be determined on building) the number of coats and undercoats of motifs will be determined by trying out on the job."

in sample panel

agraph (continued)
This is ambiguous. If Mr Sachs is not sure as to how many coats or under-coats are necessary he should try it out on samples of acoustic celotex, which material is now on hand. Otherwise, it will lead to all kinds of complications.

aragraph:
Indefinite wording.

Paragraph:
Not specific, and questionable as to what is meant by having work done "by hand", and also "advisable to do by stencil".

ragraph:
Not clear as to meaning in following- "When 75% of the work is almost completed he must apply for permission to paint over the original samples."

Is this meant to be a glaze?

ragraph;
"In order to accomplish harmonious results in changes of color or form, adding to or taking out of forms indicated in the sketches in order to express the sketches, are part of this contract without any extras."

I cannot agree to such wording.
of color, adding to or taken out may mean a great deal.

In addition to the above, it will, of course, ary to describe fully what extent the LAUPT will furnish ladders, and lighting facilities, plus expense for bond, etc.

Yours truly,

J.Barclay
C.McClure

VI. PREVIOUS DEVELOPMENT PROPOSALS

List of Articles on Previous Developments

"The Battle Over Union Station" by G. Bruce Knecht, Los Angeles Herald Examiner, January 15, 1984, Section B, p. 7.

"Union Station: Railroads Planning and Development" by Marc Zasada, Downtown News, June 9, 1986.

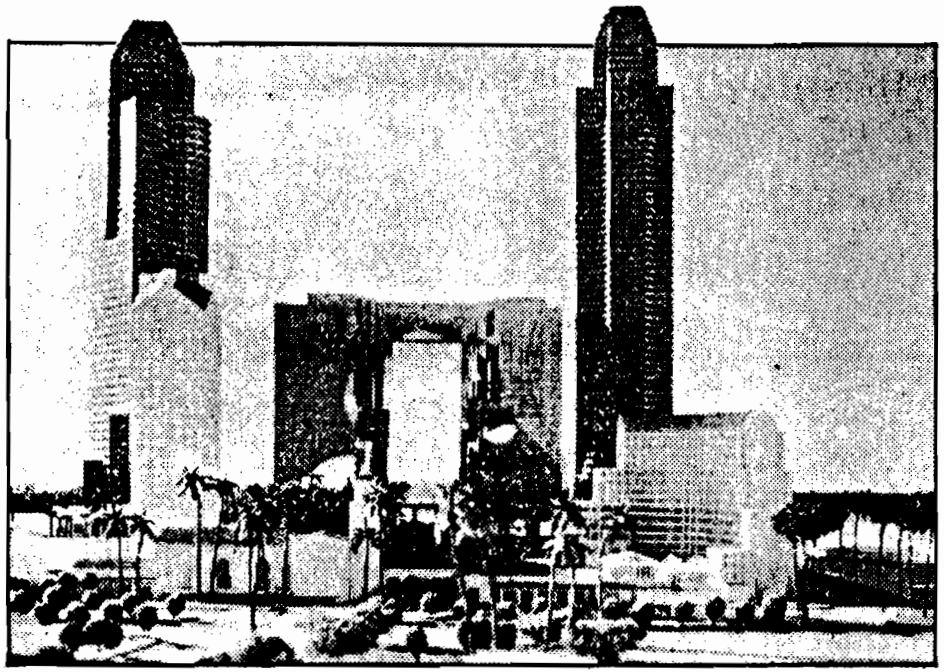
"Bold Plans for Union Station Area Unyielded", by Rich Conner, Los Angeles Times, May 18, 1988, Part II, pp. 1m,4.

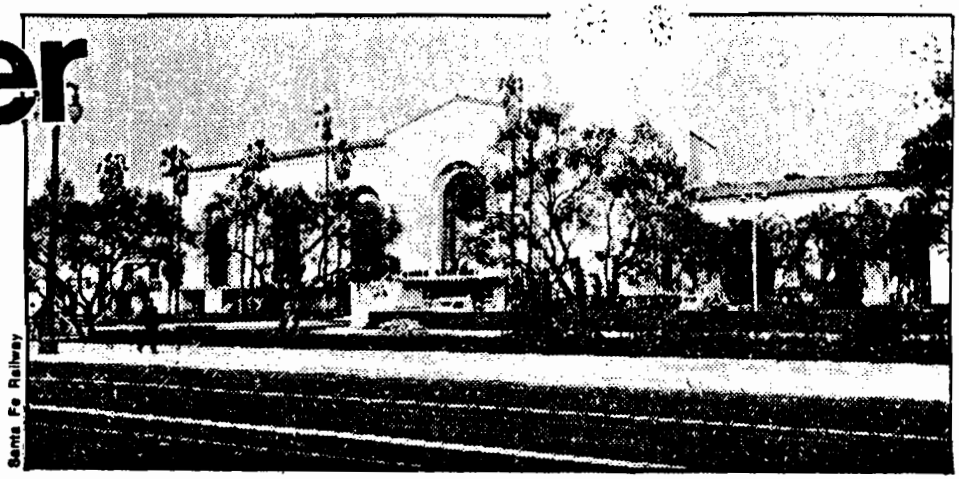
"Commerical Developers - Union Passenger Terminal, Los Angeles, CA, excerpt from Reusing Railroads, Book Two, Educational Facilities Laboratories.

UST:X13

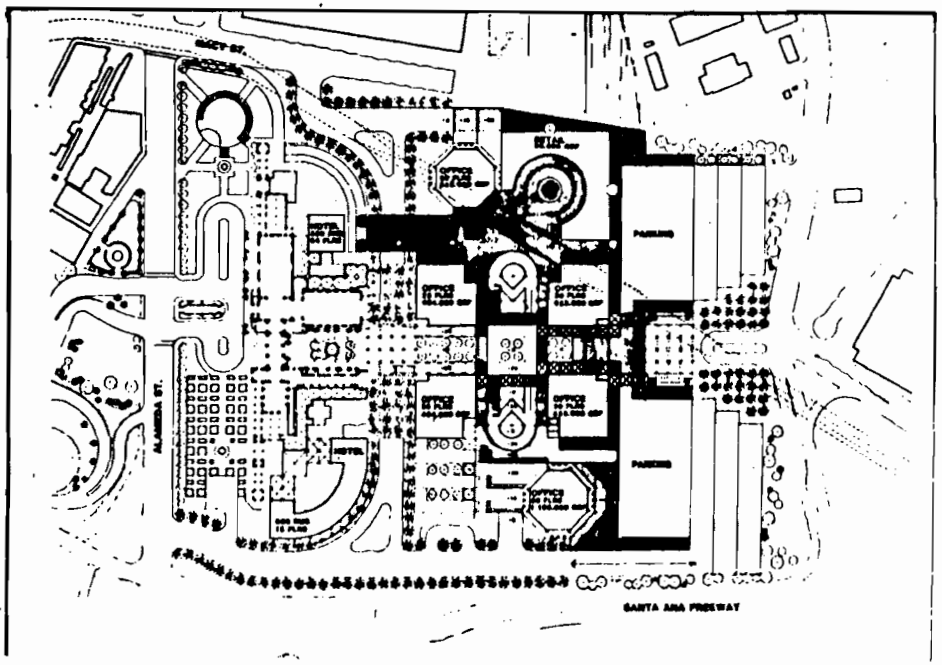
Section B/Page 7
Los Angeles Herald Examiner
Sunday
January 15, 1984

The battle over Union Station





Architech James Luckman's dramatic sprawl of skyscrapers, left, would replace historic, Spanish-style Union Station, above. Proposed complex, below.



Luckman's gleaming vision faces crucial courtroom test

By G. Bruce Knecht

ments last week is expected to decide on

Luckman's gleaming vision faces crucial courtroom test

By G. Bruce Knecht
Herald staff writer

Architect James M. Luckman has created a gleaming vision of what could be built on the site of the landmark Union Station. It calls for a dramatic sprawl of post modern-styled skyscrapers that would include two hotels, a retail complex and seven giant office buildings, one of them 60-stories high. The massive project, with 5 million square feet, would be bigger than what has already been built on Bunker Hill.

For the last two months, a large model of Luckman's grand design has been sitting next to the jury box in a Los Angeles courtroom. The model is, in fact, a crucial part of a trial that will determine who will control the development of the 50-acre station property.

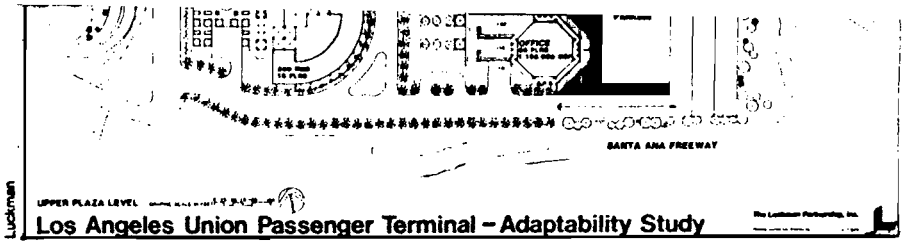
The trial pits the three railroads that own the station against the city and the state which are condemning the land so that they can create a major transportation center can be created on the site.

The railroads, which retained Luckman, claim they would build according to the architect's plan if they are permitted to retain the property. Alternately, they say their plans for the vast project offers ample proof that the property is worth the $100 million they would like to be paid for giving it up.

If the railroads and Luckman's model persuade the 12-man jury that the property does indeed have the potential for supporting a 5 million square foot complex, the railroads may get their $100 million.

If, on the other hand, the jury decides that Luckman's plan is, as the city charges, a transparent "ploy" intended to hype the value of the land, the jury may set a price closer to the $21 million that the city says the land is worth.

The jury's decision, very simply, comes down to whose assessment, the city's or the railroads', is right, and how the $79 million discrepancy between



Los Angeles Union Passenger Terminal – Adaptability Study

ments last week is expected to decide on their estimate of the land's value later this week.

"It's totally ridiculous," says a senior city official of Luckman's plan for using the property which is just north of the San Benardino Freeway and removed from the city's central business district. A local real estate broker and developer agrees:

"That area has no sense of itself; it is simply not a prime location. A 60-story office building would simply fail. I wouldn't put an office building there if you gave me the land for nothing."

Luckman, himself, who is the son of Charles Luckman, a prominent architect, acknowledges that he doubled the size of his plans after the condemnation action was filed. However, he claims that the increase was the result of what he says was an increase in the demand for downtown office space, not a desire to influence the jury.

As in any condemnation case, the property is enhanced by its proximity to Chinatown and Little Tokyo — which attract large numbers of people to the area — and the Civic Center. The very size of the property also adds to its value, according to the railroads, because it would enable a developer to construct a large, multi-building project that could create its own environment.

"There isn't another 50-acre piece of property in downtown Los Angeles. It would attract the largest developers in the country," says William A. Bitting, an attorney with Hill, Farrer & Burrill who is representing the railroads. Railroad officials say several developers expressed interest in the site before the condemnation suit was filed, although they decline to reveal their identities.

The city believes the property's potential — and value — is far more

The jury's decision, very simply, comes down to whose assessment, the city's or the railroads', is right, and how the $79 million discrepancy between them should be resolved.

government will ultimately have the right to the land, although court appeals could delay a final action. But because it is not clear that the state and the city would be willing to pay for the property if the price was set at close to $100 million, the case could very well determine whether the development of the property will be controlled by public or private interests.

During the case, the railroads — Southern Pacific, Sante Fe and the Union Pacific — argued the property's value should be assessed as if it were prime land for commercial development. "Our position is that it could be the next Bunker Hill," says William

modest than what is apparently envisioned by the railroads. City officials argue that there is simply not sufficient demand for office space to justify the construction of a large amount of office space in an area that is separated from the central business district and other commercial properties.

The city's $21 million estimate of the property's value is based on a total development of less than 1 million square feet and office space of between 300,000 and 400,000 square feet, according to Anthony J. Ruffolo, the attorney representing the city.

Real estate experts, although they say the city's estimate of the land's value

"No one is going to build there anytime soon," says Timothy I. Mason, a partner with Jones Lang Wootton, an international real estate firm. He says demand for commercial development in the area could increase in the future after it is linked to other parts of the city by mass transit, but not before then.

The city also contends that restrictive clauses in the station's lease to Amtrak limits the ability of potential developers to build on the property, and thus its value.

Deputy Mayor Raymond Remy says the best use is as a transportation hub. The facility would link the proposed Metro Rail system with bus and train service.

Remy, who says the architecturally important station building would be preserved, says the city plans to eventually allow for a limited amount of commercial and retail development on the part of the property not needed for the transportation center. "We hope that the areas that remain will be suitable for private development," he said in an interview.

He agrees with the railroads that offices, hotels and retailing would be appropriate to the area — especially after transportation facilities are established — although not on a scale approaching that of the Luckman plan.

None of the owner railroads now use the station's facilities. Amtrak passengers using the station appear to be swallowed up in its spaciousness, and most of the maintenance and warehousing buildings behind the station are also almost totally unused. As a result, the railroads are anxious to increase their return from what they view as a grossly underutilized asset.

Union Station, which was completed in 1939 at a cost of $13 million, was the last major railroad station built in the country. One of several Union Stations, it was so called because it it was

STATION: Spooky Relic of a Fading Era

Continued from Page 1

shoot a wacky movie here where the doorman was supposed to be shirtless and the red cap surly," said Pfister, the station manager. "But we made them change that."

"The airport would never have a scene like that," explained Tom Buckley, public relations chief for Santa Fe Southern Pacific.

"The airport" is an inevitable topic of conversation of train people.

Buckley recalled the time he told a producer that the cost of filming a movie at Union Station was $5,000 a day plus insurance requirements and the producer asked how he'd come up with that figure. "I didn't tell him but I'd read in the papers three days before that that's what the airport charges," Buckley said, laughing.

Aside from costs, film companies must also agree to a list of restrictions—no opening the ancient Venetian blinds, for instance.

"We're afraid they'd fall," Pfister admitted.

Lighting can also be a problem because the station is purposely kept somewhat dim so its computers won't overheat.

No matter the cost and red tape, the movie companies keep phoning.

"They've shot so many here I can't keep track of them," Pfister said as he thumbed through a file cabinet full of scripts. " 'True Confessions.' That one with Barbra Streisand in it—yeah, 'The Way We Were.' 'To Live and Die in L.A.' Something called 'The Woo Woo Kid'—I didn't recognize any of the names in that. . . . Years ago there was even one called 'Union Station.' Had a big star. . ."

"William Holden," Buckley said. "It was our 'Airport.' "

□

Even a casual inspection of the freshly painted exterior, shiny brass light fixtures, ornate drinking fountains and high-backed leather chairs reveals why Union Station's been called "The Last of the Great Stations" (the title of its biography by Bill Bradley), why it's an official cultural landmark, why architecture students come to pay tribute, why travelers snap photographs of it and send copies to Pfister's office.

Madden ranks it in a first-place tie (with Chicago's Union Station) among the nation's best.

He even diagrammed some side trips that passengers could take out of the station's waiting room if they had spare time.

"You can cut either to the left or right and find patios," he said. "Or you can go straight up the middle, out the door and across the street into one of the restaurants on Olvera Street."

Actor James Mason used to sleep on the grass in the patios between trips.

For all its obvious beauty, there is another side to Union Station—the closed portions off-limits to the public. Its ghost town.

Pfister and a secretary work in a small office in an otherwise deserted, two-story annex to the station, their door locked to keep out transients.

Scheduled to be demolished to make room for a Metro Rail station, the annex houses old locker rooms and showers (where conductors and porters once washed up), rooms full of discarded equipment with walls bearing old train schedules and floors covered with years-old newspapers.

An empty two-cell jail languishes behind a door marked "Police."

"It was used when law enforcement agencies transported prisoners," said Southern Pacific's Buckley, whose father was a locomotive engineer. "They could leave prisoners in there and go across the street and get a bite. That was before jets came in the late '50s."

On the other side of the station sits the defunct but well-preserved Fred Harvey Restaurant, named for the king of depot diners whose dying words were said to have been: "Tell the boys not to cut the ham so damn thick."

It's a Moorish-influenced wonderland of arched ceilings, leather banquettes, corked walls and multicolored tiles bearing parrots. Its Art Deco cocktail lounge features a copper-sheeted bar, bubble-encased mirrors, red stripes of indirect lighting and black marble sinks in the "Powder Room."

"This place used to really jump," recalled Buckley. "Jurors came here. Soldiers passing through. Movie stars. When Metro Rail comes here, we think people will be pounding on our door to come in and lease it."

While Buckley was talking, someone wandered in.

"Maybe it's Wolfgang Puck," he joked.

But it was a transient.

□

Ticket clerk Jack Kinney, a 30-year veteran and a third-generation railroad man, remembers the days when comic Jackie Gleason used to throw parties for his cast in one of Union Station's offices—"he'd have big tubs of potato salad and cole slaw and other food."

He remembers seeing actor Jimmy Cagney in a white suit and white shoes, and the time he asked newspaper columnist Walter Winchell for some identification before changing a $100 bill and Winchell snapped: "Here's my Mafia card."

The clientele isn't quite so glamorous anymore.

"We got one guy who takes the Desert Wind to Vegas who says he's Howard Hughes," Kinney said. "We always say, 'Have a nice trip, Mr. Hughes.' Another woman claims she's Ronald Reagan's sister."

The pigeons, which seem to use Union Station as their hangar, can be a distraction, too. One of the gray-and-white bombardiers scored a direct hit on Kinney once while he was working. "It was embarrassing because I was getting a customer a ticket," he said. "After I finished with him, I just walked out—just went home and took about three showers."

But, at least, his surroundings endure—the painted ceilings, the bronze-framed doors, the red quarry tile floors.

They were a pleasant surprise for ticket agent Ed Francis, a fourth-generation railroad man who transferred from Springfield, Mass., three years ago.

"First time I walked in, my eye caught the ceiling and I said 'Wow,' " he recalled. "There's a warmth here, not like some of the stations in the East that have more of a warehouse-type feeling."

There were other surprises, too.

"One day I see this attractive blonde woman with a low-cut dress and she's carrying several suitcases and got three small kids with her," Francis said. "As she comes through the door, one of the kids starts to run away. She reaches for him and her breasts just pop out of her dress. She starts to fix her dress and the kid takes off again. And she says, 'Oh, the hell with it!' grabs the kid and just walks into the station with her breasts hanging out.

"That's when I knew I was in L.A."

Union Station
Railroads Planning Own Redevelopment

Historic Building Will Be Preserved

by Marc Zasada

The railroads were taken by surprise last week when the *Downtown News* published details of the powerful Central City Association's long-range plan, which dwelt at length on the dream of a giant international trade complex based at Union Station.

No, the railroads are not planning to abandon Union Station, and no, they have not decided on any kind of trade complex—although they *are* planning an extensive redevelopment of their 50 acres of land surrounding the station.

And yes, they have embarked on a "joint planning process" with the Community Redevelopment Agency, which will take a year to complete. The CRA does not have jurisdiction over the area, but the railroads have asked them to participate.

Brian Weber, director of development at Santa Fe Pacific Realty Corporation, says, "A trade complex is a new one to us. It's possible that our study will reveal that as a viable concept, but it may not. Downtown L.A. is already a trade com-

Continued on page 9

Union Station Site

Continued from page 1

plex." He says the railroads will act as their own developer in the project, which would be "a mixed-use of some kind, some offices, hotels, transportation."

According to project planner Nancy Michali at the CRA, "We're taking a fresh look at everything ...at least 20 potential land uses, everything from residential to offices, hotels, festival retail. There's even the potential for a train museum. A trade complex may be a possibility, but you have to look at how that balances with the transportation concerns, and how it would fit with the historic nature of the site.

Union Station is on the national register of historic places, and the structure would remain intact under any of the plans.

According to Weber, it remains a viable transportation site, with a strong future. Amtrak plans on increasing their activities at the station, all the Metro Rail plans include stops there, and there's even a chance of the L.A. County Transportation Commission running light rail commute systems into the Valley and out to Santa Monica from Union Station.

"The area has also been identified by the CRA as a place they'd like to use for peripheral parking...we're receptive to that as well," says Weber.

Union Station and the surrounding acreage is owned in fee simple by three railroads. Santa Fe, Southern Pacific and Union Pacific as an undivided real property. Recently, Caltrans acquired two acres from them to build their busway extension.

CCA president Chris Stewart says that the business organization "Hopes there's a real possibility in the master plan for an international trade center, with a higher concentration of embassies." He says that the CCA has not yet promoted that idea with the CRA—where Stewart is a member of the board.

In the forward plan, the CCA imagines a complex "extending out to Chinatown, El Pueblo and Little Tokyo; the complex includes hotels, office towers, and the international trade exposition center...as well as supporting development covering an area of roughly two square miles."

Included in everyone's plans is a linkup with Terminal Annex, which the Post Office intends to lease out, reducing its massive operation there to a much smaller facility.

Three consultants have been contracted by the CRA to study the area and come up with a report in December, with a master plan appearing perhaps by June of 1987.

Asked if the current oversupply in Downtown office space might delay the railroads' plans, V said, "We certainly want to be sanguine office market. But we unique opportunity pecially if this ligh plan came about, to the better mousetrap

"One of the things studying is how you to the environment there. We want to pedestrian links, cap on the pleasant o spaces already there

He says that aft master plan appears from now, the arc would spend perh year to a year-and-a-l drawings. "So wouldn't see a prod any less than five yea then, one hopes the n will have improved."

Los Angeles Times

Wednesday, May 18, 1988

Bold Plans for Union Station Area Unveiled

By RICH CONNELL,
Times Staff Writer

A huge new shopping, hotel and office complex that could dramatically transform one of downtown Los Angeles' most historic areas and position Eastside Councilman Richard Alatorre as a major new player in large-scale Central City development is being proposed for the Union Station area by city officials.

A new development "strategy" just released by the city's Community Redevelopment Agency is one of the boldest new projects proposed for downtown and one likely to stimulate intense debate among local business owners, city planning officials, slow-growth activists and preservationists.

Olvera Street merchants, whose families have run small shops at the historic plaza across from Union Station for generations, already are worried that they may be overwhelmed by development. And Councilman Zev Yaroslavsky, a slow-growth advocate and possible future mayoral rival of Alatorre's, is suggesting that Union Station development will be an issue of citywide concern.

'New Urban Center'

The Community Redevelopment Agency plan calls for creation of a "new urban center" that would include millions of square feet of office high-rises, a 400-room hotel and entertainment and shopping areas, as well as a relocated and expanded Los Angeles Children's Museum. A railroad museum and possibly a Latino history museum may also be included. The proposal, which the CRA says could serve as a catalyst for new development in the fallow industrial area on the northeast cusp of downtown, is being compared by city officials to popular "marketplace" revitalization developments in historic downtown districts of Baltimore,

Los Angeles

Richard Alatorre

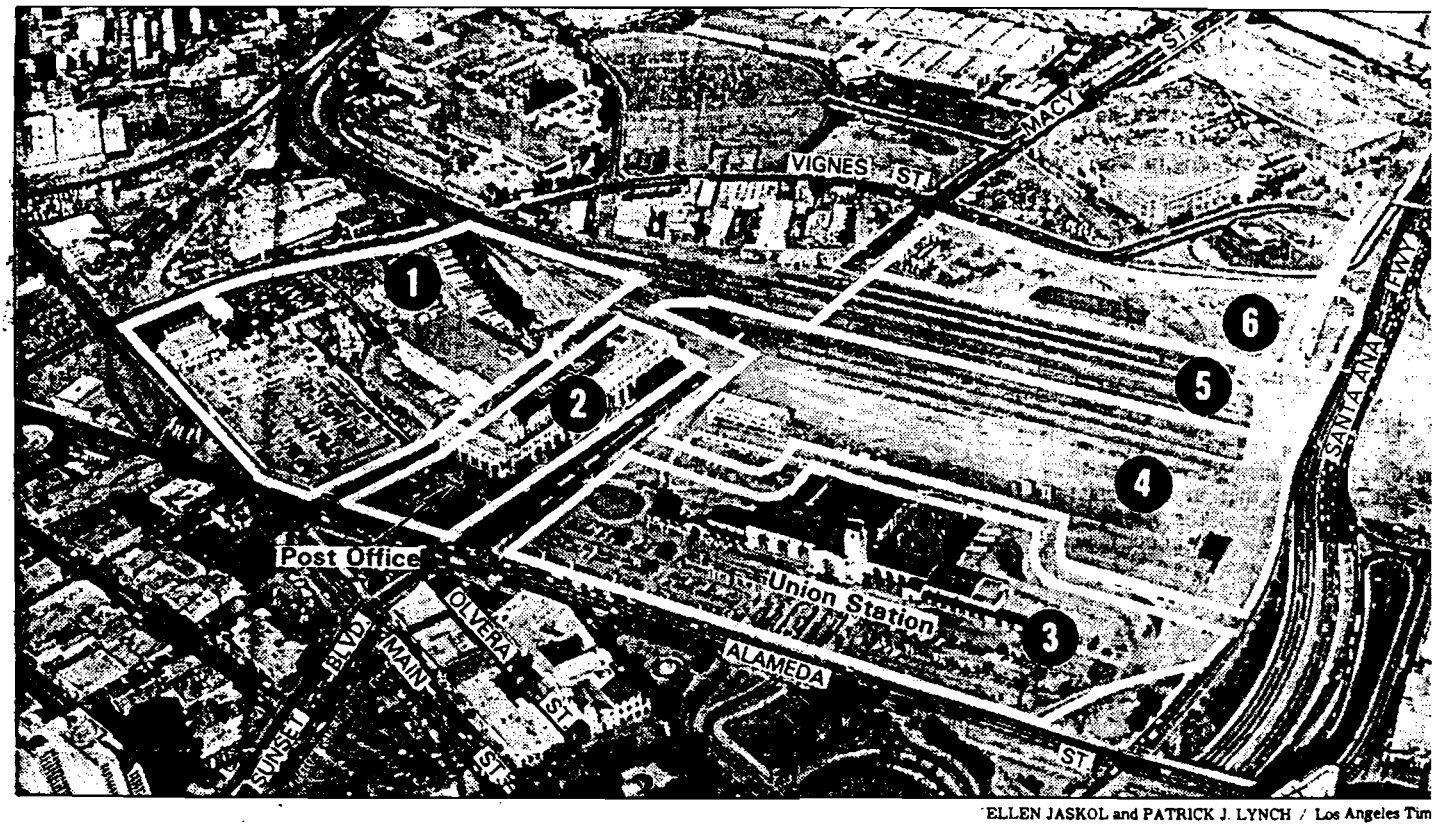
'I'm not interested in seeing the area become another Century City.'

Boston, St. Louis and other citi

With the initial phases proj for the next 10 to 15 years project would rise on 67 acr land around two historic marks—the Union Station depot and the post office's towered Terminal Annex build

CRA officials say a new district makes sense near U Station because it will be a public transit hub for the soo be completed extension of t Monte busway, the Metro subway now being built, ex San Diego and Orange C

DEVELOPMENT PLANS FOR UNION STATION



ELLEN JASKOL and PATRICK J. LYNCH / Los Angeles Tim

The city's new Union Station/Terminal Annex development plan calls for 3.2 million square feet of retail shop, hotel and office development built in two phases over the next 10 to 15 years—w the possibilty of more high-rise office development in later years.

1. A planned (second phase) 450,000-square-foot office building and parking structure. Possibly an additional million square feet of offices.

2. Possible rehabilitation and conversion of Terminal Annex Post Office building to include expanded downtown Children's Museum and other museums, rental office space, retail shops and a small post office.

3. Among the first targets is rehabilitation of Union Station to add shops inside and out and strolling and entertainment areas.

4. In first phase, terraced retail shopping/restaurant area is planned with 400-room hotel, office mid-rises and high-rises near the Santa Ana Freeway and Macy Stree and railroad museum. In second phase, an additional million square feet of office buildings.

5. Possible eventual (third phase) 2.7 million square feet of high-rise offices and shops, and a 1,500-space parking structure.

6. A transit center serving Metro Rail subway and El Monte busway, possibly a future trolley line, will be located under a 1,000-space parking structure. Eventua (in a possible third phase) additional offices would be built on top of the parking structure.

ommuter trains and a possible Eastside trolley line.

"That's a big chunk of property," aid Al Dorskind, chairman of the levelopment arm of MCA Inc., the Jniversal City-based entertainment conglomerate and one of several prominent firms interested n the project. "If you took 70 acres nd overlayed it [near] 6th and Figueroa, it would [cover] much of lowntown."

As Los Angeles' largest commercial development east of City Hall, the project would be a vehicle for Alatorre, an ambitious former state assemblyman who many observers believe wants to be the city's first Latino mayor, to strengthen his base of support.

And Alatorre has been positioning himself to harvest the juicy political plum since shortly after joining the council.

As chairman of the City Council's redistricting panel two years ago, Alatorre pushed through a little-noticed boundary change that brought his district across the Los Angeles River and encircled the Union Station area, which the CRA was already studying.

And early this year he landed a coveted state program that will give significant tax breaks to companies that locate in the proposed project and hire residents of the Boyle Heights, Lincoln Heights and El Sereno areas of his district.

"It puts him as a Hispanic leader in a position to do what [longtime downtown Councilman] Gil Lindsay has done—to bring to his district the benefits of development," said CRA chairman Jim Wood, a county labor leader and close political ally of Mayor Tom Bradley and Alatorre.

One knowledgeable dow corporate executive said that tral City business leaders a ginning to look ahead to they want to represent them the 87-year-old Lindsay d retires, an issue that could large in the next council redi ing in the early 1990s. "[Station] will be a real te [Alatorre] to see if he can everybody together to mov . . . development opportunit ward," said the executive, not to be named. "All the de

Please see DOWNTOWN,

DOWNTOWN: Union Station Plan

Continued from Page 1

ment community will be watching how skillfully he handles himself. . . . It's an opportunity to position himself to represent a large portion of downtown with the backing of the business community."

Some of Alatorre's Eastside business allies also hope to build new bridges to downtown development.

Latino Controversy

One of those is the East Los Angeles Community Union or TELACU, a controversial Latino job development and business organization. TELACU has been criticized in recent years for questionable use of federal grants, far-flung business ventures and its business dealings with Alatorre's predecessor, former Eastside Councilman Art Snyder. Alatorre was fined earlier this year by the state Fair Political Practices Commission for attempting to steer a large city contract to TELACU after the organization had paid him a $1,000 speaking fee.

John Echeveste, a TELACU spokesman, said his organization plans to compete for the U.S. Postal Service part of the project as an "overall developer . . . [and] after that a manager/operator would be a real possibility." Alatorre acknowledged that he has discussed the project with TELACU officials, but "not in any depth."

So far, Alatorre has not outlined in any detail what he thinks should be built near Union Station. He said his main interest is ensuring that Olvera Street and other historic landmarks are preserved.

"I'm not interested in seeing the area become another Century City," Alatorre said. "But I am interested in looking at different concepts . . . . Certainly, the preservation of [Olvera Street] and the integrity of it [is] more important than skyscrapers."

Cause for Alarm

Latino merchants there are worried nonetheless.

"We're concerned about the overall impact of the proposed commercial and retail activities on Olvera Street," said Vivien Consuelo Bonzo, president of the Olvera Street Merchants Assn., a group of business tenants in the city-owned El Pueblo de Los Angeles Historical Park. "We want to make sure that all of the projects . . . complement each other and do not compete directly for the same dollar."

Bonzo said merchants, whose families helped preserve Olvera Street before it became a public park, also are concerned that major development in the surrounding area could lead to sharp rent increases that will force them out.

Redevelopment agency chairman Jim Wood said there also are concerns about competition among business owners in Chinatown, to the west of Union Station, and Little Tokyo, to the south. "The challenge I see is how do we work with these existing communities to bring into being a new entity that does not overshadow them," Wood said.

Preservationists are concerned that a long list of historic structures in the area be preserved and not buried in modern architecture. "The entire scope of development will bear very careful scrutiny," said Ruthann Lehrer, a historic preservation activist and UCLA instructor.

For any commercial development to take place, Alatorre must get the City Council to make basic changes in both the area community plan and the properties' zoning which together regulate what can be built.

Slow-growth advocate Yaroslavsky said Union Station-area development, because of its size and historical significance, is "not a project or problem of local dimensions. It's like the airport or something of that magnitude and should be looked at in that context."

But Alatorre is already attempting to steer his project out of the path of the slow-growth steamroller.

"[My constituents] are not part of that problem," he said. "We have not been participants in the [city's] revitalization. . . . Why should we have to be negatively impacted for the ills of other areas? There is a need for reasoned growth in the district I happen to represent."

Crucial Question

Just how the Union Station project should proceed is a key question. There are several options. Alatorre insists that no decision has been made, but he hints that a new redevelopment area may be needed. That is one of the only ways to generate funds needed for streets, parking, rehabilitation of historical buildings, museums and other public improvements, Alatorre said.

Through redevelopment, the city becomes a partner with developers to stimulate new construction in areas officially determined to be "blighted"—meaning they are under-utilized and not expected to develop on their own.

A redevelopment area also gives the local council member a stronger hand in guiding the project, CRA officials acknowledged.

But Olvera Street merchants say they want no part of a redevelopment project, and some planners and developers doubt that there is a real need for publicly financed intervention in the Union Station area. "I would personally have a difficult time making a finding that [the Union Station property] is blighted," said Dan Garcia, president of the city Planning Commission, one body that must approve new redevelopment areas.

Commercial Developers

Los Angeles, Calif.
Union Passenger Terminal

In our previous book we placed the Los Angeles Union Passenger Terminal on the endangered species roll and noted, "There does not seem to be any great awareness about the station's future." Apparently we were wrong.

Even before we wrote that, the three railroad companies who owned the station had retained a firm of architects and planners, Daniel Mann Johnson and Mendenhall (DMJM), to tell them what might be done with their underused station.

The result is a plan for commercial reuse of the terminal, leavened with civic cultural events. Amtrak will continue to use part of the station to accommodate about 3,000 people daily (seven arrivals and seven departures).

The railroads are retaining ownership of the station, leasing it to Union Station Company, a joint venture by two large development companies, one of which is partly owned by DMJM.

The following account of the project – from the first study to current status – was provided by Robert Kite, a DMJM associate.

"The study recommended four concurrent provisions for the station. First, to restore and maintain the famed architecture, which is a classic example of early California Spanish style. Second, to provide and keep the nostalgia of the 1940s for the millions who remember the station as a landmark in Los Angeles. Third, to maintain the building as a railroad museum and exhibit area. [illegible] factory on San Francisco's waterfront.

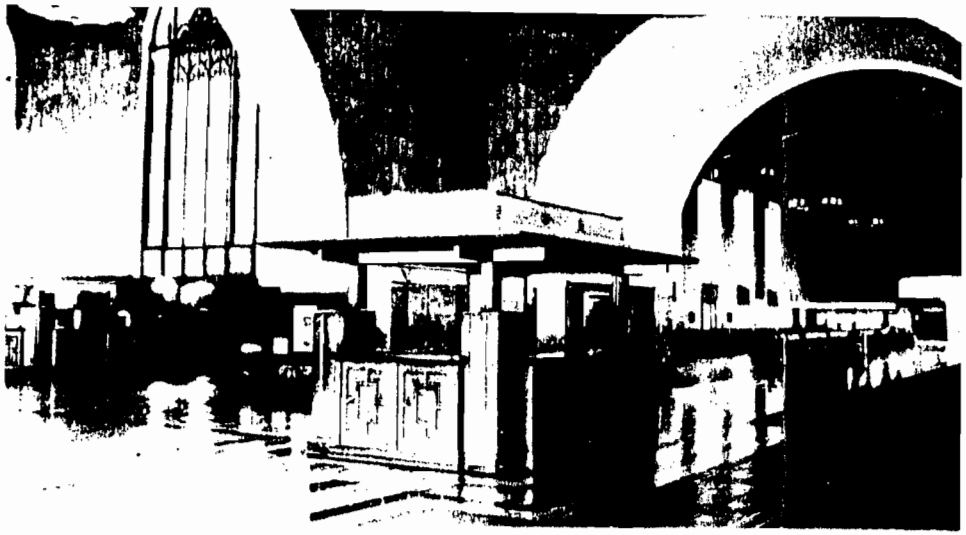
"All proposals would keep the railroad station working, but the present 15 tracks will be decreased to four. Amtrak's waiting room would be in a prominent location until it could build a new station.

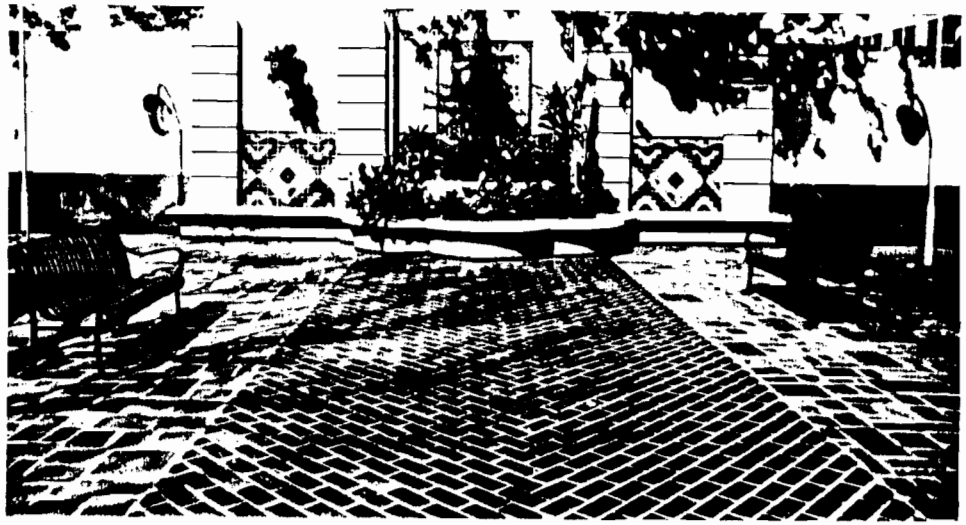
"The developers in the joint venture negotiated a 55-year lease for 11 of the terminal's 40 acres, at a minimum of $200,000 a year. About 200,000 sq ft of the building will be renovated, added on to, or in some way slightly changed to accommodate the restaurants and retail stores. About 75% of the building will be tenant space. A 700-car parking lot will be provided within the 11 acres, most of which will be landscaped exhibit areas, including two magnificent original patios that nobody would dare change.

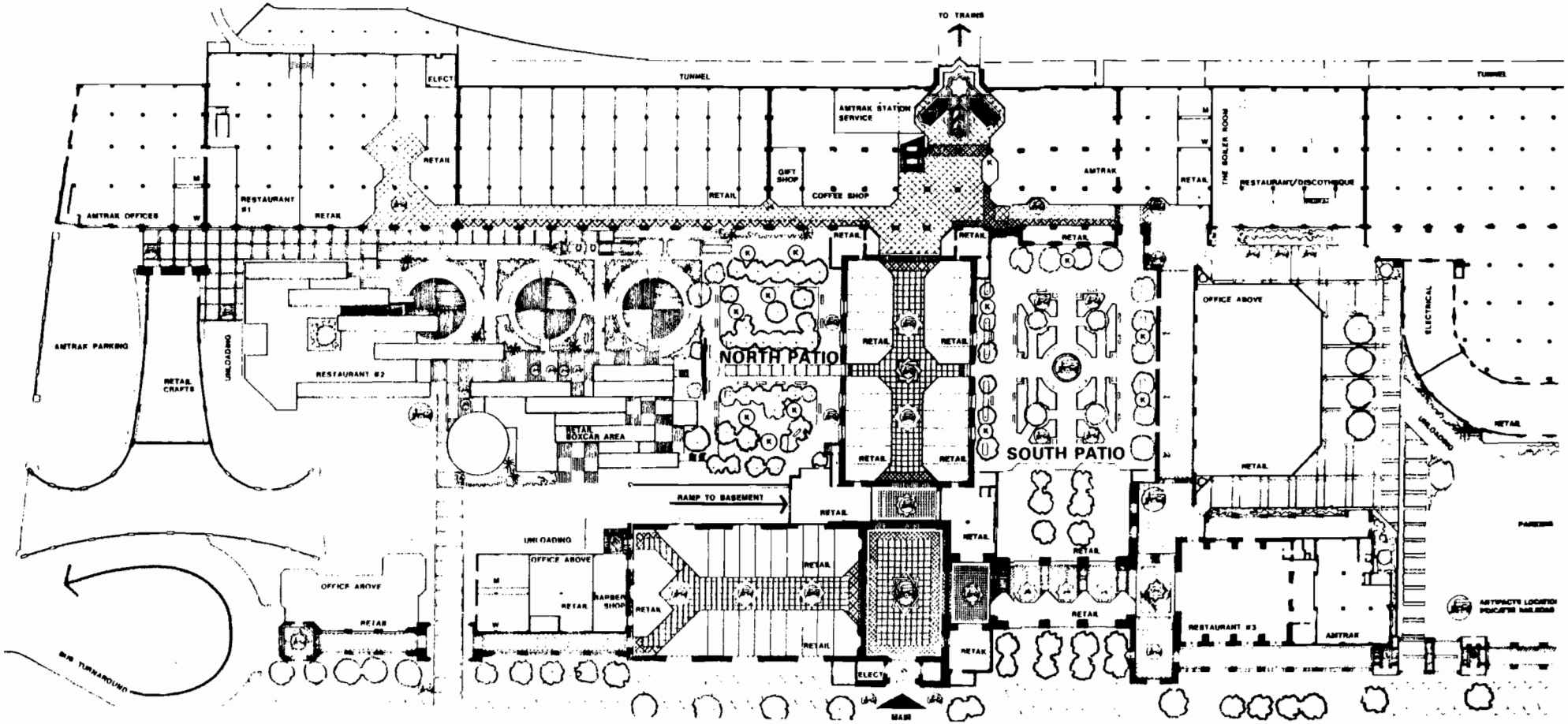
"The station is one of the most sensitive issues in Los Angeles, a building difficult to tamper with, and this causes a lot of problems. It has been declared a National Historic Landmark and a California historical monument, so there are many changes we can't make. And we have so many people and interests to satisfy: the planning department, the fire department, the various historical societies, the owners, Amtrak, and, of course, the investors. The building department says it must be brought up to 1974 code, and that is not easy. Although the building is structurally sound, nothing else was. For instance, we would have to redo the whole of the electrical system.

"Then there are private interest [illegible] American community is directly across the street, on Olivera Street, which is also a very famous place that gets three million visitors a year because Los Angeles was founded there. Those people also have their particular needs and recommendations for the project.

"Probably the most important economic aspect of this whole project is its good location. It's in the heart of downtown Los Angeles, adjacent to the historic El Pueblo de Los Angeles, Little Tokyo, the civic center, the convention center, and the financial center. The station itself can be a giant tourist attraction and is expected to pull in about three million people the first year, probably twice that number eventually. Amtrak hopes to double its number of passengers because of the exposure the reused station will get, and vice versa."






TO TRAINS
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AMTRAK OFFICES
RESTAURANT #1
NORTH PATIO
SOUTH PATIO
OFFICE ABOVE
ELECTRICAL
AMTRAK PARKING
RETAIL CRAFTS
UNLOADING
RESTAURANT #2
RETAIL BOXCAR AREA
RAMP TO BASEMENT
BARBER SHOP
RESTAURANT #3
B/B TURNAROUND
MAIN

VII. BIBLIOGRAPHY

BIBLIOGRAPHY

LOS ANGELES PUBLIC LIBRARY, available materials on Union Station

Publications:

Architect and Engineer, August 1935; Early elevation concepts and Designs for Building, p. 54

September 1935; Early elevation concepts and Designs for Building, p. 42

Southwest Builder and Contractor, May 7, 1939; p. 10 - 13, illus.

Architect and Engineer, May 1939; p. 37 - 41, illus.

Los Angeles Times, March 19, 1939; Fiesta Plans
April 5, 1939; Fiesta Plans
April 19, 1939; Fiesta Plans
April 26, 1939; historic locomotive arrives for dedication
May 1, 1939; pt. 1, p. b, illus; full page spread of drawings, illustrations
May 4, 1939; **Dedication Issue**

May 3, 1974; pt. 6, p. 1; Union Station Plan Told
July 22, 1974; pt. 4, p.1, 6; illus; Rail Stations - a Terminal Case
June 24, 1979; Home Magazine; p. 44, 45; illus
May 24, 1980; pt. 2, p. 1, col. 1 - 3; Council Moves to Help Buy Union Station; RTD, Caltrans Would Join to Make Landmark a Mass Transit Hub
July 18, 1980; pt. 1, p. 3, col. 5,6; Union Station to be Public Transit Hub; Caltrans Will Buy 44-acre L.A. Facility
January 19, 1981; pt. 2, p.1, col. 1 - 4 L.A. Station; Where Financial and Transportation Problems Meet
February 3, 1984; pt. 1, p. 3, 18; Union Station Price Tag is a Jolt
March 24, 1984; pt. 2, p. 1, col. 1 - 2; Union Station Price Upheld - Judge Doubts Fairness of $84,000,000 Figure

March 19, 1986; pt. 2, p. 1; illus
End of the Line for
Turtledoves
March 1, 1987; pt. 2, p. 1, illus; Union
Station - Memories of a
Fading Era
May 18, 1988, pt. 1, p. 1; Bold Plans for
Union Station are Unveiled
May 1, 1989; pt. 1, illus; Union Station -
An Anomaly whose Time Has Come
May 6, 1989; pt. 2, p.1, illus; Union
Stations 50th Birthday

Los Angeles Herald Examiner; September 21, 1975; California Living
Section; p. 16 - 19; Union
Station: Dead and Buried? Not Yet!
June 8, 1979; Sec. A, p. 1, 10; Suddenly Its
Standing Room Only
at Union Station
January 20, 1982; Sec. A, p. 8, col. 1
Caltrans Offered to Buy Union
Station
April 30, 1989; p. A1, illus
Union Station; Its 50 years
old, but Still on the
Fast Track

Amtrak Wheel Clicks; June 1979, p. 1 - 4; illus; Union Station's
40th Feted by PRS

Architectural Digest; 10:2:118-119, illus

Pictoral California, Summer 1939; p. 12 - 13, illus.

Los Angeles Cultural Heritage Board; August 6, 1962, Fact sheets
on Historic Cultural Monuments

Los Angeles Cultural Heritage Board; June 3, 1973, Fact sheets on
Historic Cultural Monuments

Books:

Los Angeles, The Land of Destiny, Oppenheim; p. 8, illus

Santa Fe, Duke; p. 76 - 79, 80

The Last of the Great Stations, Bradley

Los Angeles Two Hundred, Lavendar; p. 98, illus

Battle for a Union Station at Los Angeles, Stimson; p. 37 - 44

Commemoratives:

Brochure 1939: To Acquaint You with the Union Station

No date given: Tentative Outline for a Parade and Observation to Commemorate the Opening of Union Passenger Terminal at Los Angeles (filed under Union Station).

biblio.

COUNCIL OF PLANNING LIBRARIANS Exchange Bibliography #1450

RAILROAD STATIONS IN THE UNITED STATES

by

Jack W. Seto
Urban Planner
Chicago, Illinois

The purpose of this bibliography is to survey the published literature on railroad stations in the United States. Railroad stations, during their prime years of construction, were considered urban focal points or gateways, relying greatly upon effective areal planning and landscaping. Of an estimated 40,000 stations which were built in this country, 20,000 have been demolished due to the decline of railroad passenger service. Nearly 500 railroad stations have been recycled across the country; others lie abandoned or little used. The bibliography has been arranged into three sections:

I. The origins of railroad stations in the U.S., particularly according to architecture, location and other significance.

II. Station closings and/or demolitions in the U.S.--both actual or threatened.

III. Adaptive Uses--both implemented and proposed for railroad stations.

The foregoing three groups of bibliographic listings include published sources--periodicals, newspapers, books and special reports. These listings are grouped first by general classification, then by individual states in the union.

Omission of any materials indicated that such omitted sources were not catalogued in general indexes or were largely local in origin. Readers are encouraged to submit such omissions for inclusion in a future supplement.

I. THE ORIGINS OF RAILROAD STATIONS IN THE UNITED STATES

A. General

"Architectural Beauty in the Civic Gateway of Today," Craftsman, 28, 1915, pp. 78-91, 117-118.

"Commercial Buildings, Office Buildings, Banks, Transportation Buildings, Radio and TV Buildings and Theatres," Architectural Record. New York: F. W. Dodge Corp., c.1953.

"Modern Railway Passenger Terminals by Alfred Fellheimer," Architectural Forum, 53, December 1930, pp. 655-694.

"Railroad Architecture in North America Today," The Architectural Record, 104, October 1948, pp. 140-142.

"Railroad Stations" (entire number), L'Architecture d'Aujourd'hui, 7, August 1936.

"Railroad Stations," Landscape, 20, October 1975, p. 1.

"Small Railroad Stations by Price and McLanahan," American Architect and Building News, 100, October 4, 1911.

"The Architecture of Railroads," 104, October 1948, pp. 122-146.

"The Designing of Small Railway Stations," American Architect and Building News, 100, 1911, pp. 130-132.

"The Gateway of a Metropolis; With Birdseye Perspective," Saturday Evening Post, May 8, 1920.

The Shipper's Guide; containing a complete list of all railroad stations (and canal and river towns) in the United States and Canada, J. A. Phelps, 1859.

"The Suburban Railway Station," American City, September 1912, pp. 26-227.

"Two Plans of Railroad Station Grounds That Serve as City Parks," Park and Cemetary, 22, April 1912, p. 45.

A.A. General

Alexander, Edwin P. Down at the Depot: American Railroad Stations from 1831 to 1920. New York: Clarkson N. Potter, 1970.

American Institute of Architects. The Relations of the Railways to City Development. Washington, D.C.: Gibson Bros., 1910.

American Locker Co., Inc. Railroad and Bus Terminal and Station Layout. Boston, 1945.

American Park and Outdoor Art Assoc. The Railroad Station--Summary of an Investigation, 1901, pp. 20-21.

American Society of Planning Officials. Rail Lines and Terminals in Urban Planning. Chicago: Planning Advisory Service, January 1956.

Barman, Christian Augustus. An Introduction to Railway Architecture. London: Art and Technics, 1950.

Baxton, Sylvester. "The Railway Beautiful," Century Magazine, 7, April 1908, pp. 805-818.

Beach, W. W. "Railway Stations of Moderate Size," Architectural Forum, 44, April 1926, pp. 251-272.

Briggs, M. S. "The Architecture of Railway Stations," Architect and Contract Reporter, 90, 1913, pp. 133-135, 156-157, 170-172, 189-190, 209-210.

Bryant, Keith L. "Cathedrals, Castles and Roman Baths: Railway Station Architecture in the Urban South," Journal of Urban History, February 1976.

Burrey, Suzane. "Notice the New Haven? (Stations by Minoru Yamasaki), Industrial Design, 3, February 1956, pp. 52-70.

Crane, Jacob L., Jr. "Street Development in Relation to Railroad Terminals," American Society of Civil Engineers Journal, 1923.

Davies, J. Vipord and J. Hollis Wells. "Terminal Stations," Western Architect, 15, February 1910, pp. 16-19.

Delano, F. A. "Railway Terminals and Their Relation to City Planning," Western Architect, 15, January 1910, pp. 5-11.

Desmond, Harry W. "The Work of Frost and Granger," The Architectural Record, 18, 1905, pp. 132-145.

Droege, John A. Passenger Terminals and Trains. New York: McGraw-Hill Book Co., 1916.

Eberlein, Harold D. "Recent Railway Stations in American Cities," Architectural Record, 36, August 1914, pp. 98-121. Utica, New York; Rochester, New York: Kansas City; Detroit.

Edmonson, Harold A. and Richard V. Francaviglia, eds. Railroad Station Planbook. Milwaukee, Wisconsin: Kalmbach Publishing Co., 1977.

Elliott, Huger. "Modern City Gates," a special article on railroad stations in various cities and countries, Architectural Review, 18, May 1912, pp. 49-55.

Elvin. R. "Railway Station," Arts and Industry, 63, September 1957, pp. 76-81.

Evans, Walker. "The U.S. Depot, a Portfolio," Fortune, 47, February 1953, pp. 138-143.

Ford, Frederick Luther. Report on Railroad Station Approach and Harbor Front Improvements--New Haven, Connecticut. New Haven, Connecticut: Van Dyck and Co., Inc., 1912.

Foster, J. R. and M. F. Schmidt. "Rail Terminals and the Urban Environment," Transportation Journal, 15, Fall 1975, pp. 21-8.

Gilbert, Bradford Lee. Sketch Portfolio of Railroad Stations and Kindred Structures, with Nearly Two Hundred Illustrations. New York City: The Railroad Gazette, 1895.

Grow, Lawrence. Waiting for the 5:05--Terminal, Station and Depot in America. New York: Main Street/Universe Books, 1977.

Hamlin, Talbot. Forms and Functions of 20th Century Architecture. New York, 1952 (with chapter by A. Fellheimer on railroad stations).

Henry, Robert S. "Rail Entrance and Facilities in American Cities," American Planning and Civic Annual, 1950?, pp. 125-128.

Hungerford, Edward. "Railroad Stations," Saturday Evening Post, April 19, 1930.

Lewis, H. M. "Terminals Important in Regional Planning," Railway Journal, 78, April 10, 1926, pp. 670-673.

Lubschez, Ben J. "Railroad Terminals," Builder, 117, November 7, 1919, pp. 468-469.

Lubschez, Ben J. "Railroad Terminals of the United States," Journal of Royal Institute of British Architects, 26, 1919, pp. 265-273.

McClure, W. Frank. "Station Gardening," House and Garden, 4, November 1903, pp. 243-244.

McCrea, Mrs. A. E., et al. "Railroad Improvements," American Civic Association, 1905-08.

McFarland, J. Horace. "How to Improve Railroad Stations and Their Surroundings," American City, 9, November 1913, p. 440.

Meeks, Carroll L. V. "Depots in the City Plan," American Institute of Planners Journal, 14, Spring 1948, pp. 4-14.

Meeks, Carroll L. V. "Form Beneath Fashion: 19th Century Depots," Magazine of Art, 39, December 1946, pp. 378-380.

Meeks, Carroll L. V. "19th Century Train Sheds, Design Analysis," Architectural Forum, 84, February 1946, pp. 104-109.

Meeks, Carroll L. V. "Some Early Depot Drawings," Society of Architectural Historians Journal, 8, January-June 1949, pp. 33-42.

Meeks, Carroll L. V. "The Life of a Form: A History of the Train Shed," Architectural Forum, CX, September 1951, pp. 162-173.

Meeks, Carroll L. V. The Railroad Station; an Architectural History. New Haven: Yale University Press, 1956.

Phillips, J. H. "The Evolution of the Suburban Station," The Architectural Record, 36, August 1914, pp. 122-127.

Richardson, W. S. "The Terminal--The Gate of the City," Scribner's Magazine, 52, October 1912, pp. 401-416.

Snibbe, Richard. Small Commercial Buildings (includes railraod stations), 1956, pp. 106-108.

Stineman, Norman M. "Spanish Mission Architecture in Railway Passenger Stations," Architect and Engineer, 62, 1920, pp. 75-79.

Vogel, Robert M. "Historic Railroad Sites," Railway and Locomotive Historical Society Bulletin, April 1971, pp. 33-35.

Waugh, Frank A. "Rural Railway Station Grounds," American City, 12, May 1915, pp. 378-380.

I. THE ORIGINS OF RAILROAD STATIONS IN THE UNITED STATES

B. By State

ALABAMA

"The Birmingham, Alabama Terminal Station," American Architect and Building News, 88, October 7, 1905, p. 120.

ARIZONA

Greenberg, Peter. "Yuma, Arizona Railroad Station," Westways, 68, February 1976, p. 26.

"Railroad Station at Ajo, Arizona," Architecture, 39, January 1919.

Westways, 68, February 1976, p. 26.

CALIFORNIA

Bakewell, John, Jr. "The Santa Fe Station, San Diego," Architect and Engineer of California, 41, 1915, pp. 39-47.

"Berkeley--A California Railroad Depot," Architect and Engineer of California, November 1906, p. 25.

Hill, G. S. "Union Passenger Terminal at Los Angeles," Architect and Engineer, 108, March 1932, pp. 39-42.

Hunger, P. "Los Angeles Celebrates Opening of the New Union Passenger Terminal," Pencil Points, 20, June 1939, Sup. 20.

Jennings, Frederick. "Some California Railroad Stations," Architect and Engineer of California, 48, February 1917, pp. 43-54.

Littler, Charles R. "A Dream Come True," California Arts and Architecture, 55, June 1939, pp. 28-29. Los Angeles, California, Union Passenger Terminal.

"Los Angeles Gets Its Union Terminal," Architectural Forum, 54, October 1933, p. 334.

"Los Angeles Union Depot," Architect and Engineer, 115, October 1933, p. 67.

"Los Angeles Union Passenger Railway Station," Architect and Engineer, 136, May 1939, pp. 37-41.

"Los Angeles Union Passenger Terminal; D. B. Parkinson and J. Parkinson, Architects' Views and Plans," Architectural Record, 89, January 1941, pp. 133-5.

"Oakland Southern Pacific Depot," Architect and Engineer, February 1917, pp. 52-53.

"Plaza Site for Union Terminal...Approval of the Plaza Site for a Proposed Union Passenger Terminal in Los Angeles," Southwest Builder and Contractor, April 29, 1921, p. 7.

"Pomona, California--Two Spanish Style Depots are Built by Southern Pacific," Southwest Builder and Contractor, May 16, 1941, p. 30.

"Railroad Station (for Los Angeles)," Architectural Record, 89, January 1941, pp. 133-136.

"Railroad Terminal Problem and City Planning," Southwest Builder and Contractor, July 9, 1920, p. 10.

"Railway Station, Santa Fe Railroad, San Diego," American Architect, 112, November 21, 1917.

"San Diego--Depot Plans Out," Los Angeles Times, June 28, 1914, Part VI, p. 2.

"San Diego," Architect and Engineer, October 1916, p. 48.

"San Diego--Santa Fe to Build," Los Angeles Times, July 17, 1910, Part VI, p. 8.

"San Juan Capistrano, Santa Fe Depot, The Formal Opening of the New Station," Los Angeles Times, October 28, 1894, p. 9.

"Santa Fe Passenger Terminal, San Francisco; H. L. Gilman, Architect; Views," Architect and Engineer, 134, August 1938, p. 32.

Shinn, Charles H. "California Railroad Station Gardens," Garden and Forest, 6, October 4, 1893, p. 413.

"Station-Service a Burlingame," L'Architecture d'aujourd'hui, 27, Octobre 1956, p. 66.

Stimson, Marshall. "Battle for a Union Station at Los Angeles," Historical Society of Southern California Quarterly, 21, 1939, pp. 37-44.

CONNECTICUT

"Gare de Chemini de Fer a New London, Connecticut (Marcel Breuer)," L'Architecture d'Aujourd'hui, 27, Mars 1956, pp. 46-47.