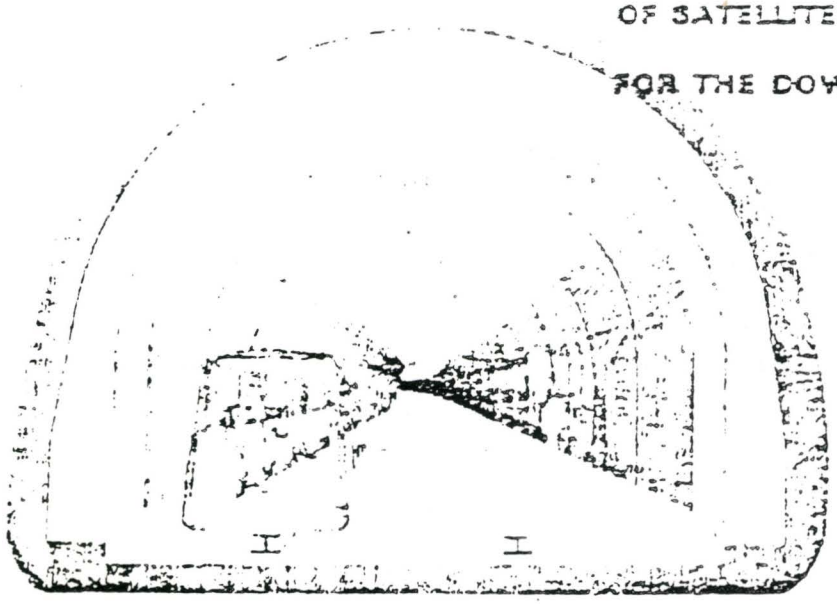
PACIFIC ELECTRIC TUNNEL

A FEASIBILITY STUDY

TO DEVELOP THE CONCEPT
OF SATELLITE PARKING
FOR THE DOWNTOWN AREA



of Engineering City of Los Angeles January 1971

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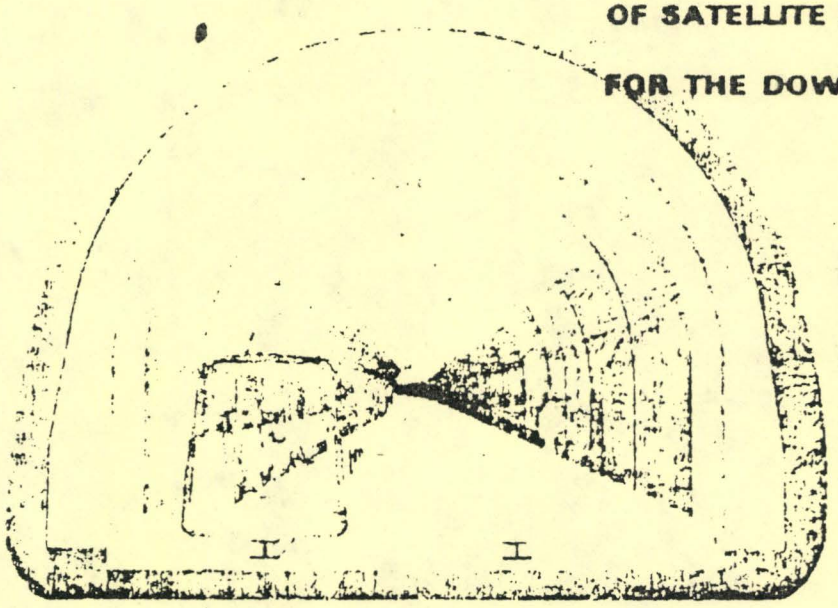

Bureau of Engineering City of Los Angeles January 1971

PACIFIC ELECTRIC TUNNEL UTILIZATION

A Feasibility Study to Develop the Concept of Satellite Parking, Short-Haul Mass Transit, and Transportation Alternatives for the Central Business District

A Staff Report of the
Bureau of Engineering

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Street and Freeway Design Division
of the Bureau of Engineering

January, 1971

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INTRODUCTION

During the next few years, the Bunker Hill area will grow significantly as a commercial center, and high density residential complex, which will substantially increase the traffic generated. Access will remain predominately by highway and freeway via the private automobile. Although traffic congestion within the downtown area has remained relatively constant over the past few years, traffic demands will increase significantly as additional major office buildings are constructed. Demand for both long-term and short-term parking will also significantly increase.

The Traffic Action Council of the Los Angeles Area Chamber of Commerce has expressed a strong interest in studying the feasibility of re-opening the abandoned Pacific Electric Tunnel. The Mayor's Office has requested the Bureau of Engineering to evaluate the rehabilitation of the abandoned Pacific Electric Tunnel, extending from Fourth Street and Figueroa Street to the proximity of Second Street and Glendale Boulevard, for the installation of a people-mover system. The people-mover system can provide direct and efficient access to satellite parking. The term "people-mover" in this report is used to define a system of varied specifications which will transport passengers between perimeter terminals in parking structures and terminals located

within Central City and the Downtown core. The Pacific Electric Tunnel provides an opportunity to implement a major leg of the system between a satellite parking site in the vicinity of Second Street and Glendale Boulevard and the building complex within the Bunker Hill Urban Renewal Project.

It has been established that the need for additional parking to serve the downtown area will increase substantially in the next two to three years. The City now has title to the tunnel and easement and will not have to acquire additional rights of way for the main line of the people-mover system. The only areas that will need to be acquired by the City are for the parking and maintenance facilities and necessary street widenings in their general location. A second major asset of the tunnel is that it presently passes beneath the Harbor Freeway which provides two benefits. There will be no disruption to the heavy freeway traffic during tunnel restoration and it provides an aesthetic relief by not requiring the overhead facility on this leg of the system, and particularly, over the "ramp jungle" of the Harbor Freeway.

This report includes the problem definition and analysis, preliminary criteria for the people-mover system, preliminary engineering data for tunnel restoration, parking structures, and necessary street improvements required in the vicinity of the parking structures, including preliminary cost estimates. In addition, conclusions and recommendations are presented.

Based on the preliminary economic and engineering analysis, the rehabilitation of the tunnel and the installation of a people-mover system is a viable proposal. The effectuation of this proposal can be the first phase in a system of satellite parking facilities constructed around the periphery of the downtown area.

PROBLEM STATEMENT

When the Bunker Hill Urban Renewal project is completed, there will be a daytime working population of from 60,000 to 75,000 in the project area. The Atlantic-Richfield Plaza, adjacent to the Bunker Hill Urban Renewal Project, will provide jobs for approximately 20,000 additional people. With this substantial increase in daytime population, the streets in the downtown area will not have sufficient capacity to carry the automobile traffic that will be generated by the increased employment and shopping opportunites. In order to reduce the present levels of traffic congestion during peak hours and to free the Downtown area for vital business activity, a reduction in the number of automobiles on Downtown streets is necessary. At the same time, additional capacity is needed to serve the increased demand generated by new Downtown development. The possibility of providing additional major street and parking capacity in the Central City core is prohibitive in view of land costs and the increasing intensity of development, with the one possible exception of the opportunities afforded by full-scale redevelopment projects, such as the Bunker Hill Project.

The abandoned Pacific Electric Railroad Tunnel has long been considered a liability to the City; however, in view of the intensity of new and proposed development in the Downtown area and the opportunities and advantages afforded by the tunnel to a Downtown transit system, the tunnel becomes an asset to the

community. The two major advantages of the utilization of the tunnel are that the City has the tunnel and the easement, and that the tunnel passes beneath the Harbor Freeway. It is proposed that a 2700-foot section of the tunnel be rehabilitated to accommodate the installation of a people-mover system to provide quick and efficient access to satellite parking located in the proximity of the intersection of Second Street and Glendale Boulevard.

The distribution of goods and freight in the areas of intensive land use in the Central City core is an ever-growing problem to the business community. It appears possible to utilize the people-mover system during off-peak hours for the purpose of transporting and distributing goods and supplies and providing service access. With properly designed interfaces at the proposed parking structures and in the Downtown area, it would be possible to bring containerized goods and freight to the area of the satellite parking structures, place these items on pallets or in containers within properly designed vehicles and have the goods distributed to the proper downtown destinations. The freight-handling capabilities could be an added benefit accrued in connection with the construction of the people-mover system. However, the financial benefit has not been estimated nor included in the economic evaluation contained herein.

The portion of the tunnel considered in this report is shown in Figure 1. An aerial photograph showing the westerly portal of the existing tunnel and the Bunker Hill skyline is shown in Figure 2. The overlay indicates the approximate tunnel location, the proposed northwesterly extension of the tunnel, and the areas considered feasible for the parking facilities.

Figure 3 shows the westerly portal of the existing tunnel near the intersection of Second Street and Lucas Avenue looking in an easterly direction from Lucas Avenue. The tunnel cuts through a low hill for a distance of approximately 2000 feet and extends in a southeasterly direction to Bunker Hill. At Emerald Street, approximately 200 feet southeasterly of the westerly tunnel portal, the depth of the floor of tunnel is about 85 feet below the street grade. At Third Street and at Beaudry Avenue, approximately 1150 feet and 1900 feet southeasterly of westerly tunnel portal, respectively, the depth of tunnel floor is about 110 feet below street grade. The depth of the tunnel floor decreases to approximately 50 feet under the Harbor Freeway.

At Figueroa Street adjoining Bunker Hill's Parcel G, the depth of the floor of the tunnel would be approximately [redacted] below the street grade. Projecting the floor of the tunnel horizontally from Figueroa Street to Flower Street, the depth of the tunnel floor below Flower Street would be approximately 38

feet below the street grade. At this depth, the extension of the tunnel and related terminal facilities within Parcel G could be incorporated into the basement of any building complex that would be constructed on the site.

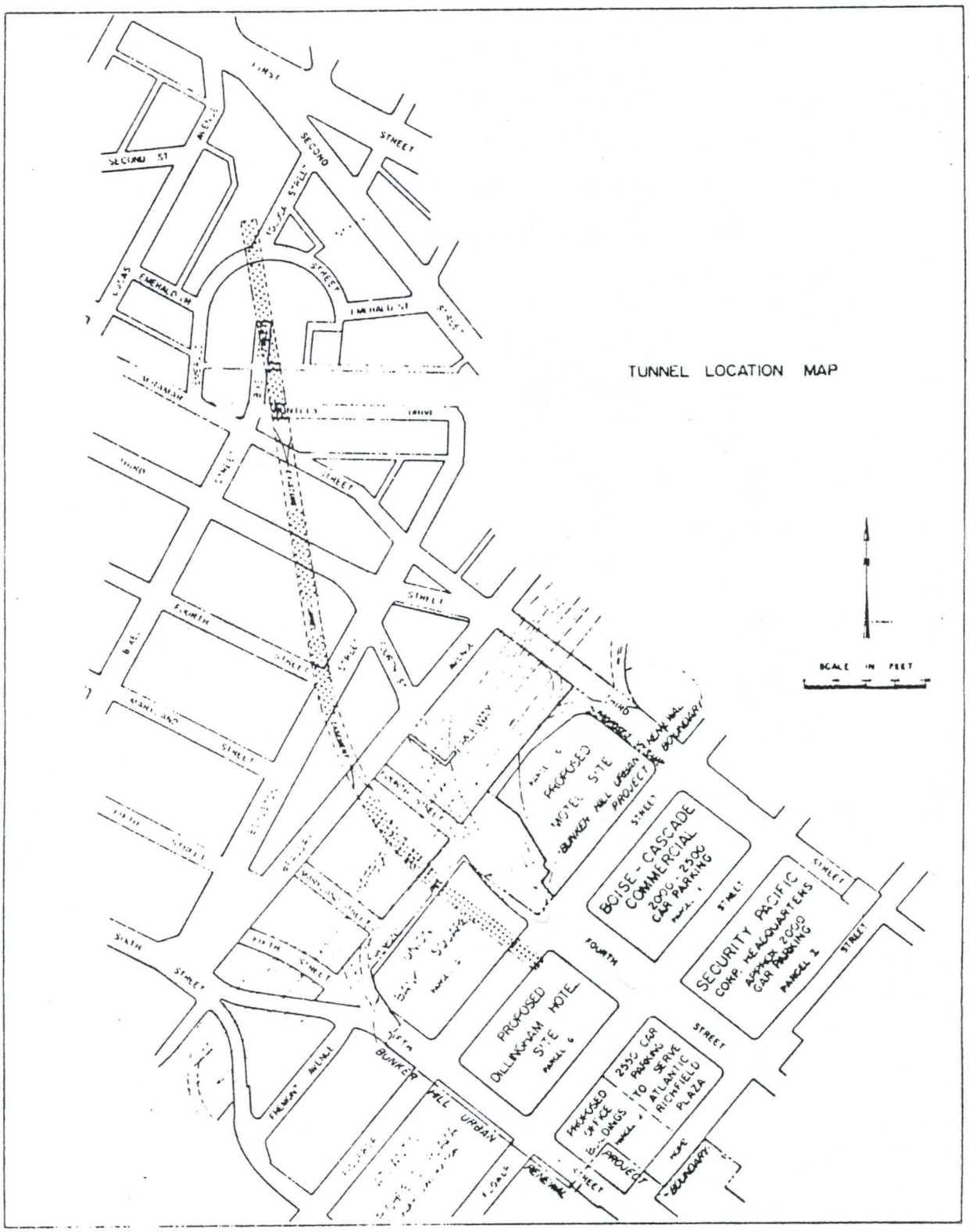

TUNNEL LOCATION MAP
PROPOSED HOTEL SITE
BOISE-CASCADE COMMERCIAL
SECURITY PACIFIC
PROPOSED DILLINGHAM HOTEL SITE
ATLANTIC RICHFIELD PLAZA
BUNKER HILL URBAN
FOURTH
FIFTH
SIXTH
STREET

Figure 1

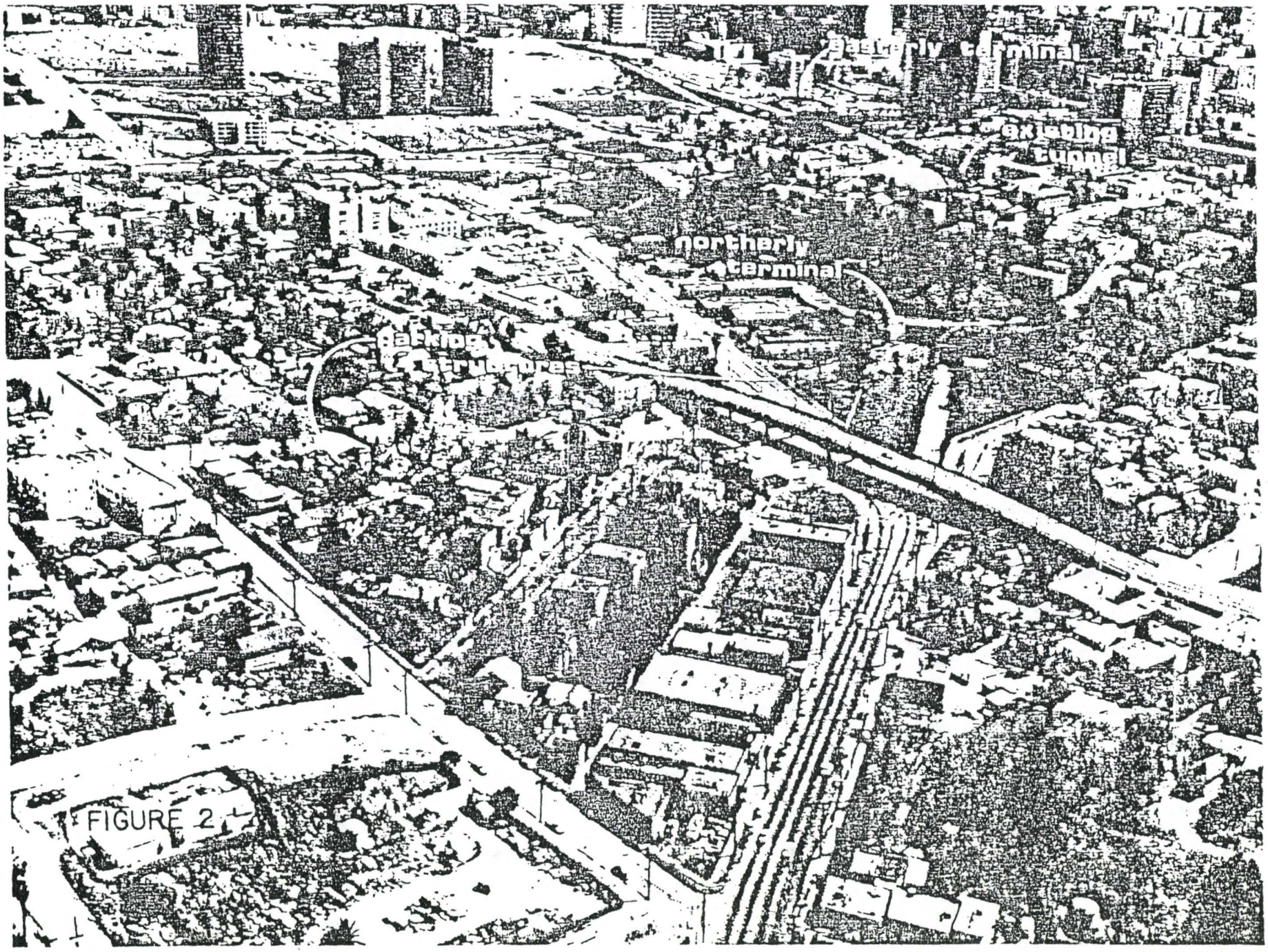
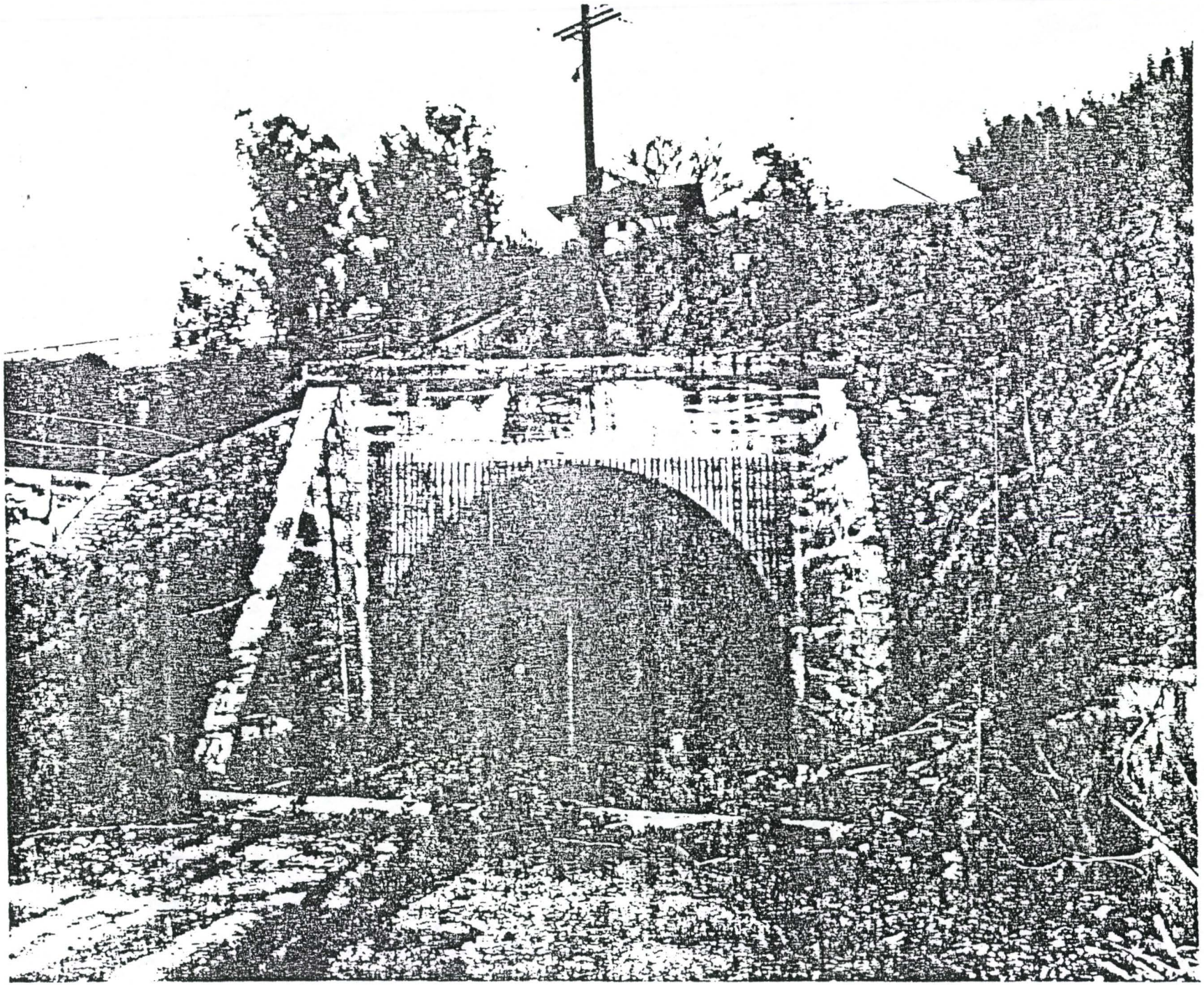


FIGURE 2



BACKGROUND OF TUNNEL

The tunnel was constructed by the Pacific Electric Company under the terms of a franchise agreement with the City to construct, maintain, and operate an "electric railroad with one or more tracks . . . through a subway . . ." Operation of the system began in 1929. The tunnel extended from beneath the Subway Terminal Building (south of Fourth Street between Hill Street and Olive Street) approximately 5000 feet north and west to a portal near the intersection of Glendale Boulevard with Second Street. The tunnel has the form of an arch approximately 28 feet wide at the springline by 21 feet high. In 1955, use of the tunnel for rail service terminated.

Early in 1966, the Community Redevelopment Agency determined that the existence of the tunnel would hinder development of some of the properties and reconstruction of the streets in the Bunker Hill Redevelopment Project and requested the Bureau of Engineering to investigate ways of solving this problem. A legal investigation of the City's rights by the City Attorney revealed that by terms of the original franchise agreement, the City could order the tunnel removed from beneath City streets at the expense of the Southern Pacific Company, successor in interest to the Pacific Electric Company. A removal order was then served on the Southern Pacific Company which led to the Company's offer to give the tunnel and tunnel easement to the City. The City Council approved acceptance of the tunnel and easement and the legal agreement and conveyance was recorded July 6, 1966.

Because none of the concerned public or private entities previously showed any interest in further utilization of the tunnel for transportation purposes, little consideration had been given to this possibility. The City's previous policy was to quitclaim sections of the tunnel easement to the Community Redevelopment Agency as requested. At present, the section of tunnel from the east property line of Figueroa Street to approximately 100 feet east of the center line of Flower Street has been physically removed. The portion under Figueroa Street has been filled with earth and one section removed for future construction of a 42-inch sewer which is planned to project approximately 4 feet below the soffit of the tunnel. That portion of the easement between the east property line of Figueroa Street and the west property line of Flower Street (Bunker Hill - Parcel G) has been quitclaimed (Council File No. 135601, Sup. No. 5) and a hotel is proposed to be constructed on the site by the Dillingham Corporation.

The quitclaim for that portion of the easement between the east property line of Flower Street and the west property line of Hope Street (Bunker Hill - Parcel J) has been approved (Council File No. 143409). Construction of a 2550-car-capacity parking structure to serve the Atlantic-Richfield Complex began in May, 1970. The design of the parking structure complicates the easterly extension of the tunnel along the existing alignment. However, it

appears possible to construct a new tunnel section through the parking structure. This new tunnel section would require redesign and reconstruction of a portion of the structure and shoring up of part of the foundation. Approximately 50 to 100 parking spaces would be eliminated by this extension. Once the extension is through the parking structure to serve Atlantic-Richfield Complex, it would be possible to extend the people-mover system easterly from Hope Street to Hill Street. However, only the portion of the tunnel lying between its westerly terminus and the proposed Dillingham site is presently being considered for the people-mover system.

The representatives of the Dillingham Corporation have expressed a strong interest in having a terminal located within their proposed hotel.

It should be noted that the Board of Public Works, on November 12, 1969, adopted City Engineer Report No. 1, Section 1, which established a policy to not quitclaim any romaining portions of the tunnel.

INTERFACE WITH THE DOWNTOWN AUXILIARY RAPID TRANSIT

The Downtown Auxiliary Rapid Transit (DART) System, which is in the preliminary planning phase, proposes an inter-loop serving the downtown core with radials connecting the inter-loop with satellite parking facilities on the periphery of the downtown area. One segment of the inter-loop is proposed to be located in Flower Street between First Street and Eighth Street. The people-mover system proposed in this report could provide the first radial for the system. However, it should be noted that the effectuation of the DART System is not necessary for the operation of the people-mover system proposed in this report.

TUNNEL REHABILITATION

The Bridge and Structural Design Division of the Bureau of Engineering has analyzed the structural adequacy of the existing tunnel. Based upon concrete core samples taken from the tunnel and the existing loading on the tunnel section, it has been determined that the tunnel is overstressed according to present standards. In order to provide an adequate structural section, a reinforced concrete liner is required. An architectural rendering of a cross section of the reconstructed tunnel with the Westinghouse people-mover system shown in the tunnel is indicated in Figure 4. A typical section of the existing tunnel with the necessary new construction to provide for the people-mover system is shown in Figure 5. The estimated cost of the construction of the 2700-foot section of the tunnel is as follows:

Tunnel liner with tile and concrete floor	$1,908,000**
Miscellaneous, including sandblasting, waterproofing and suspended ceiling	298,000
Tunnel lighting	110,000
Tunnel ventilation	135,000
Total cost of tunnel reconstruction	$2,451,000 *

In addition, it is required that a new tunnel be constructed under Figueroa Street since the existing tunnel at this location has been removed. The estimated cost of this 100-foot length of tunnel is $281,000.

* Does not include cost of guideway for people-mover system

** ENR for L.A. @ 1500±

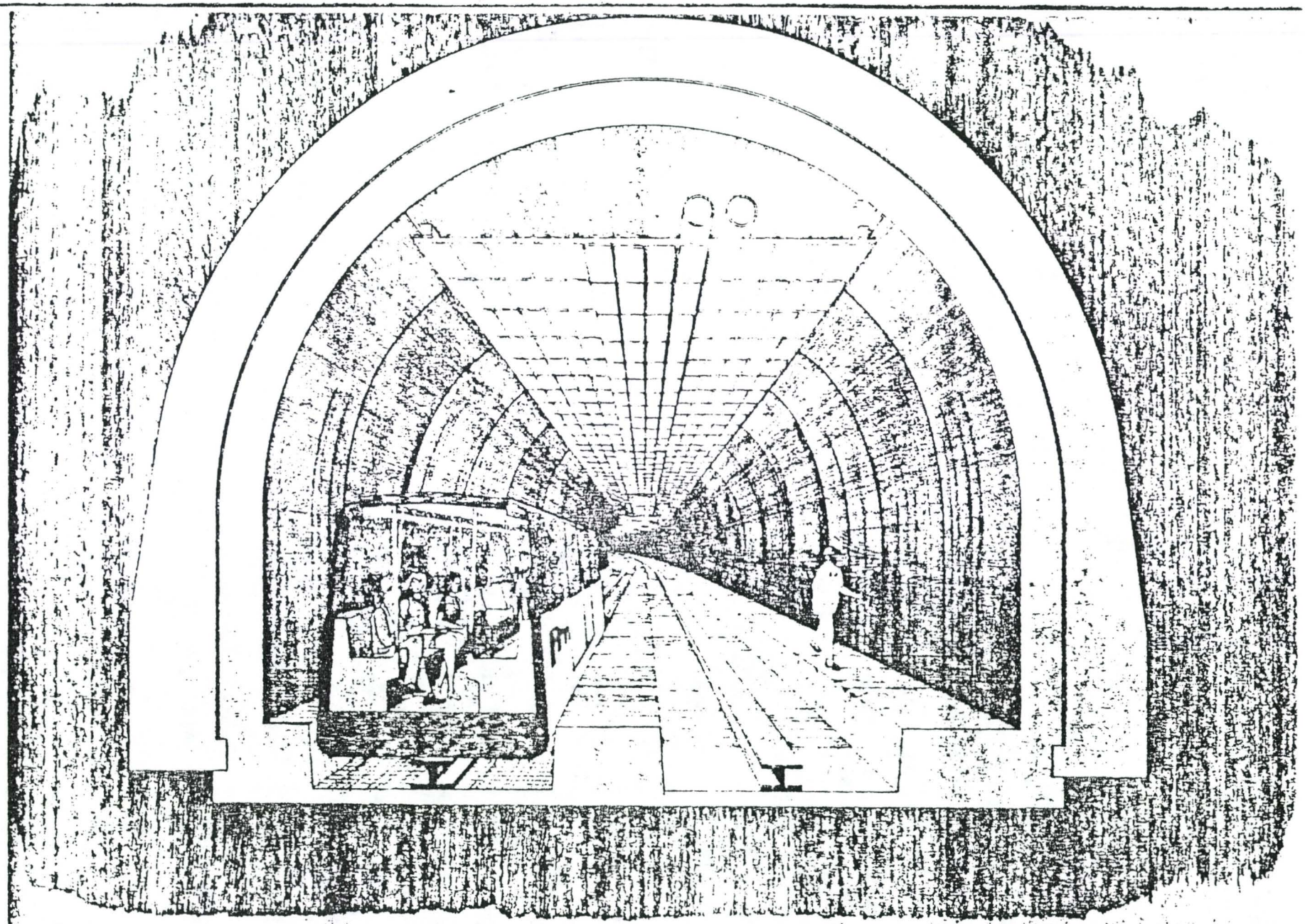
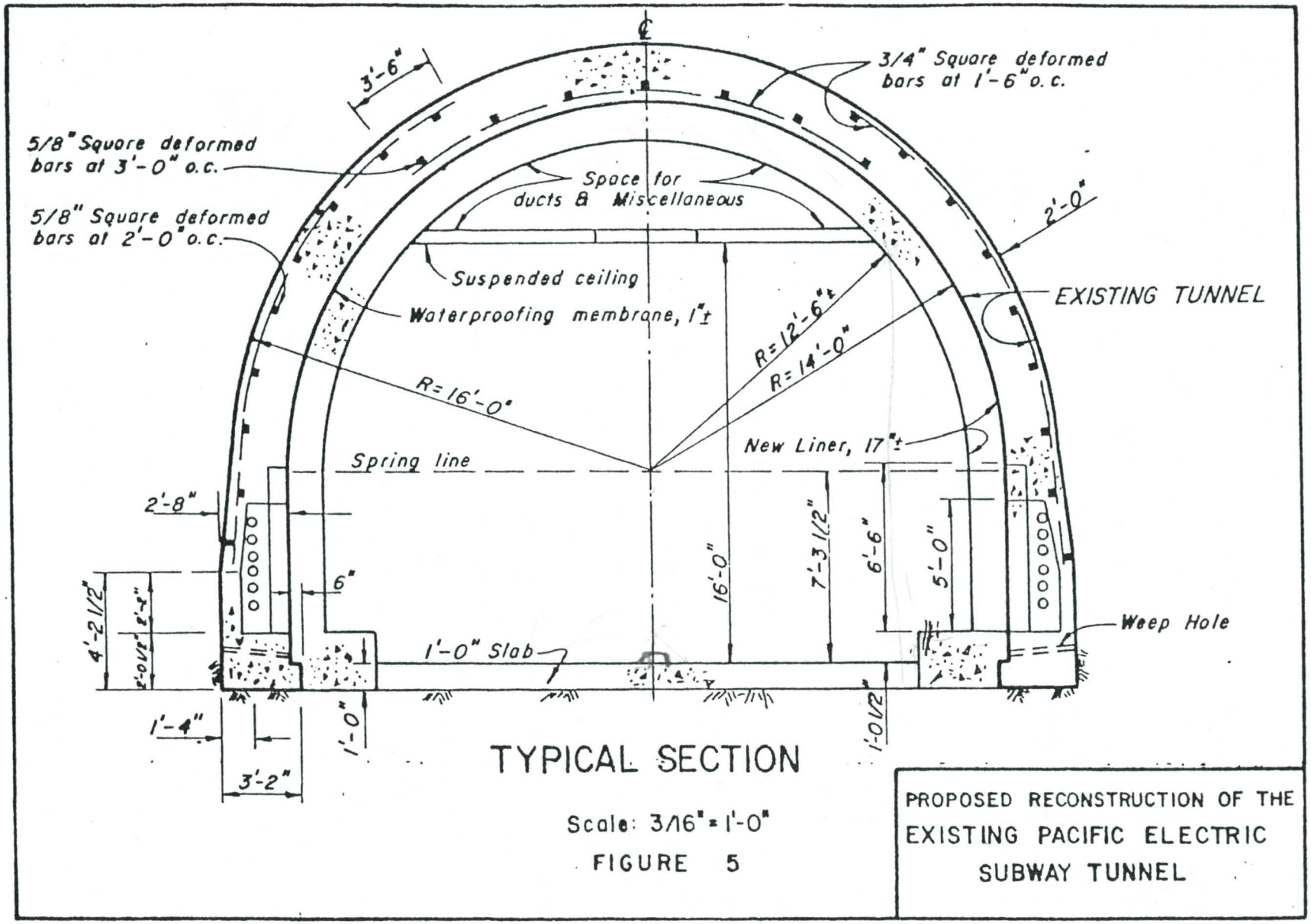


FIGURE 4



TYPICAL SECTION

Scale: 3/16" = 1'-0"

FIGURE 5

PROPOSED RECONSTRUCTION OF THE EXISTING PACIFIC ELECTRIC SUBWAY TUNNEL

The estimated cost of construction of a new tunnel with the same cross-section and length would be $11,000,000. When comparing the alternative the cost of rehabilitation of the existing tunnel is approximately $8,500,000 less than cost of an equivalent new tunnel.

The necessary construction on the proposed Dillingham Hotel site for the people-mover system should be the responsibility of the developer of the site. In connection with the construction of a building complex on the site, stipulations should be made to require the developer to make provisions for station facilities for the people-mover system, and to provide a suitable interface between the proposed DART System and the people-mover system proposed in this report. This can be accomplished by having the City Council request the Community Redevelopment Agency to add a special stipulation to the sale of the site to the effect that provisions would be made for the above-mentioned facilities within any proposed building complex on the site. Renderings of a proposed terminal layout for the building complex are shown in Figures 6 and 7. Escalators and elevators would provide the interface with the proposed DART System. The renderings for the terminal are included for illustrative purposes and represent only one of the possible configurations for the terminal facilities.

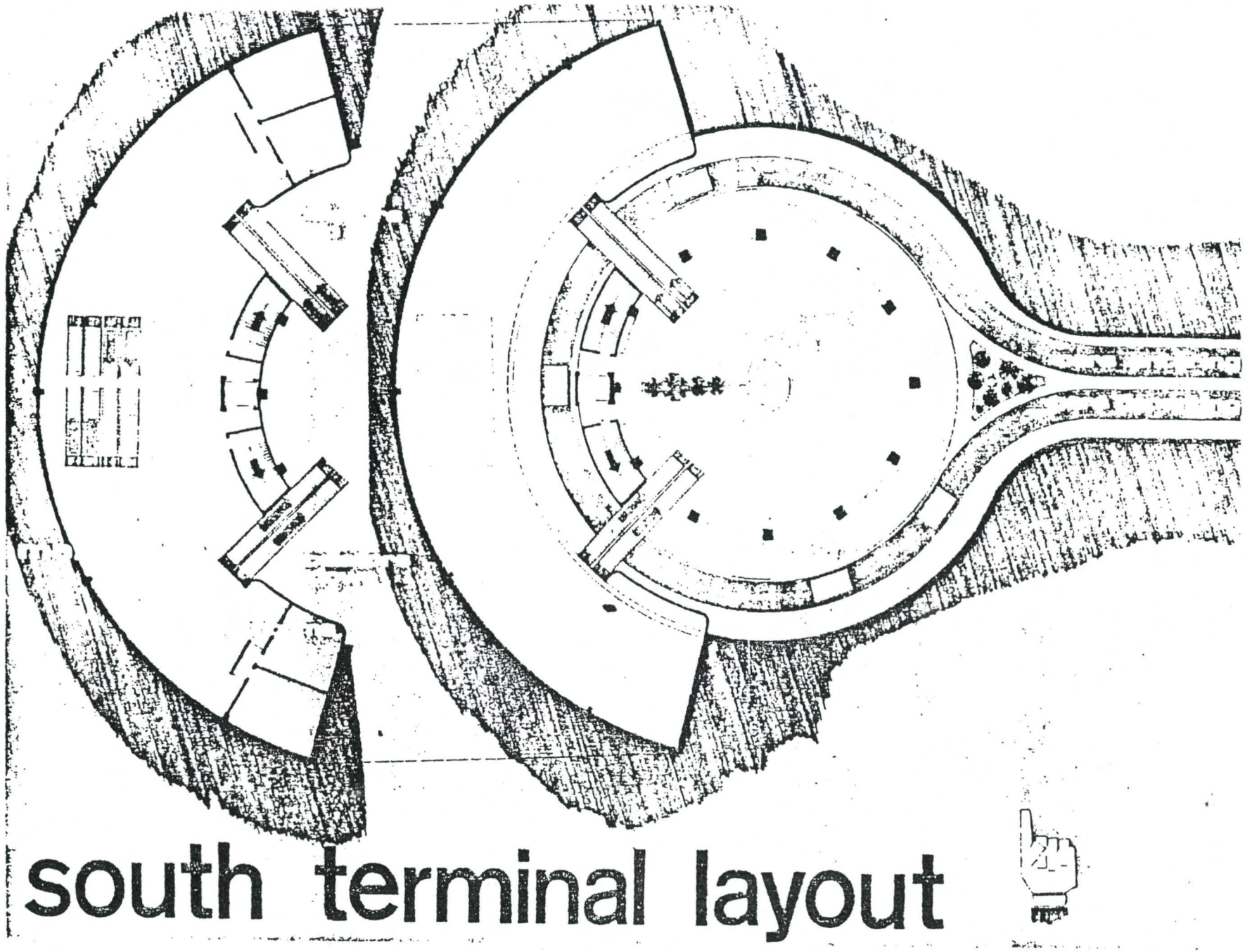


FIGURE 6

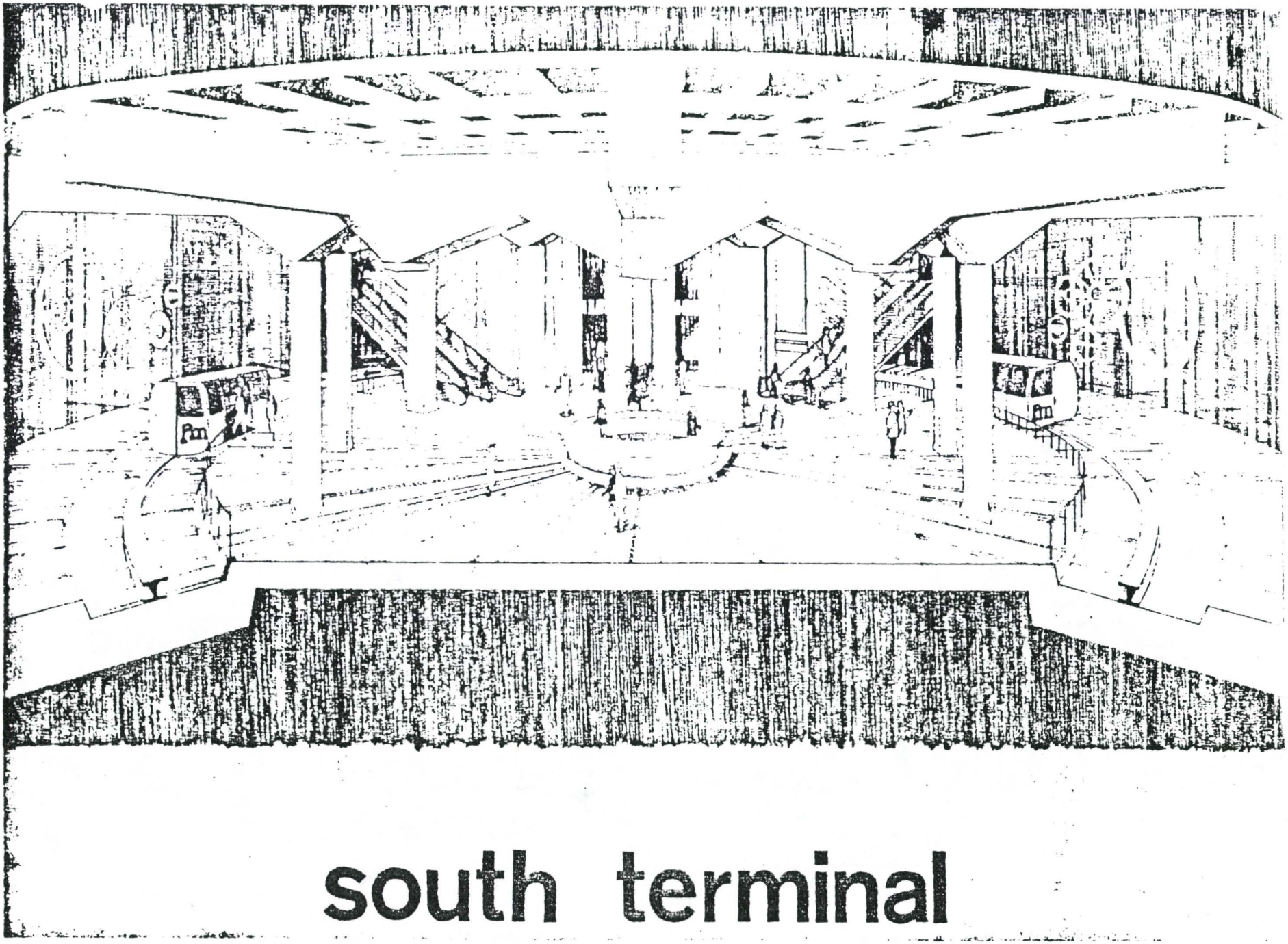


FIGURE 7

WEST LEG ROUTE SELECTION

BUNKER HILL PEOPLE MOVER

JULY 1973

THE COMMUNITY REDEVELOPMENT AGENCY
OF THE CITY OF LOS ANGELES, CA.
727 W. 7th Street
Los Angeles, California 90017

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Several alternative west leg guideway route alignments are available.

Selection criteria include such factors as guideway length, costs of land acquisition, people mover vehicle time of travel, and in the case of the Pacific Electric Tunnel, cost of refurbishment of the existing portion, plus new tunneling to reach Bunker Hill.

Examination of the interrelationships of these factors is a complex task. An increase in guideway length, for example, has several deleterious results: An increase in travel time, causing reduction in commuter use, thereby reducing parking revenues, increased maintenance costs, increased capital costs and additional vehicles must be purchased, increased costs of energy.

This analysis was done to develop gross total cost estimates for each of the alignments considered as potentially suitable.

Contributors not included in the analysis were costs for Demolition, Improvement and Relocation, loss of saleable land on Parcel C due to the additional land take required for the tunnel route, the retaining wall on the South side of Beverly Boulevard leading to the tunnel. Tunnel escape ports were not estimated for number, location or cost. Loss of parking revenues resulting from increased travel time were not calculated.

SUMMARY

The City-owned Pacific Electric Tunnel was suggested for Bunker Hill People Mover use. It offered an environmentally sound, available right of way into the CBD, under, rather than over the Harbor Freeway.

Open from the entry at Lucas Avenue and Second Street to Figueroa Street the tunnel is nonexistant under the Portman Hotel site and nonexistant at the ARCO garage. It is open from Hill to Hope Streets.

Technical analysis shows tunnel/People Mover compatibility. From under Beaudry Street new tunnel must be dug to Parcel C in Bunker Hill. Curving North between Fourth Street bridge columns it would surface in a trench running parallel to the freeway. Turning easterly on Parcel C at the Third Street offramp, it would continue at 6% grade to the People Mover station on the Los Angeles World Trade Center.

The City's Bureau of Engineering[1] has determined the tunnel must be lined, both to assure structural integrity and to seal the structure (it passes through ground carrying much water).

[1]Bureau of Engineering, City of Los Angeles, January 1971 "Pacific Electric Tunnel, a feasibility study to develop the concept of satellite parking for the Downtown Area".

Opportunity for system expansion such as providing guideway spurs into the Temple area, is greater on the surface routes.

Right of way and relocation costs, assuming the tunnel is given to the CRA by the City, are significantly less than the surfact routes being considered. However, the overall cost advantage is in favor of the elevated guideway.

Tunnel round trip distance is 1610 feet longer, or 60 seconds additional round trip time. This equates to a requirement for four additional People Mover cars to carry the required number of passengers per hour. Costs of maintenance of the additional guideway and the vehicles, coupled with increased energy costs both for the additional length and grade total $53,000 per year.

Based on system costs over a 25 year period, Table 1 summarizes data used in selection of the Second Street route over the tunnel route:

RELATIVE COSTS SUMMARY

	2ND ST. (ELEVATED)	TUNNEL
HARDWARE & CONSTRUCTION	3,075,200	4,489,500
COST OF ADD'L VEHICLES	0	260,000
25-YR ADD'L OPERATING COST (4% ANNUAL INFL.)	0	2,207,450
RIGHT-OF-WAY ACQUIS.	1,037,000	193,550
RELOCATION	148,000	67,000
TOTAL	$4,260,200	$7,197,500

PHYSICAL DESCRIPTION OF ROUTES

The shortest route from the West-Hill Station to within the West Parking Structure site along Second Street is 3,844 feet in length. Figure 1 shows the number of lineal feet of guideway for each route.

Each of the four routes shown were measured from the east property line (EPL) of Figueroa Street to the NPL of Rockwood, within the site.

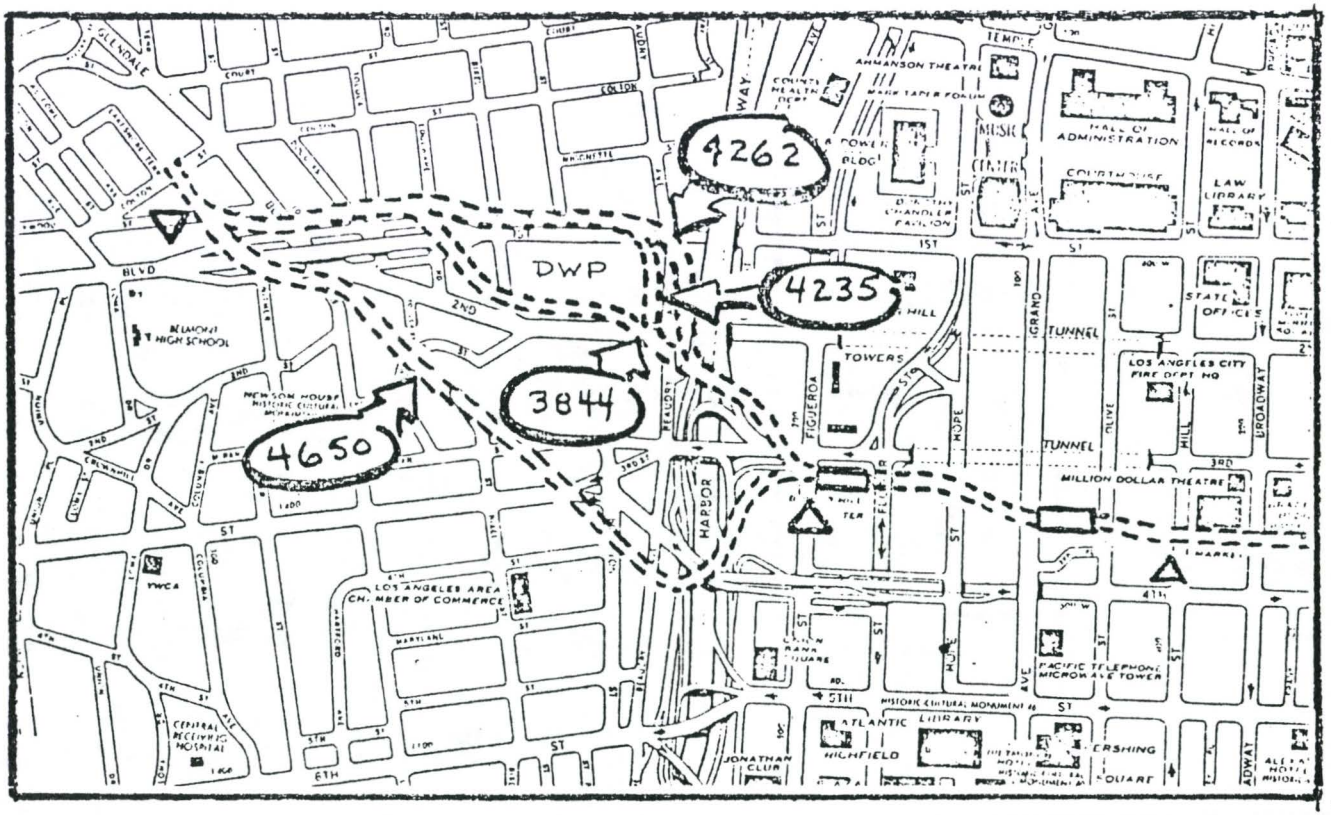


FIGURE 1 PAGE 4

FIRST AND SECOND STREET ROUTES

The Second and First Street routes are above grade; that is, elevated along their entire lengths.

Following the southern edge of the Department of Water and Power facility, the Second Street route crosses the Beverly Boulevard/First Street viaduct at its eastern end, joining the First Street routes at that point.

Of the two First Street routes, one follows along the eastern edge of the DWP facility. Column heights across this end of the facility must be at least thirty feet, in order that clearance will be provided for the reel-handling crane used in that area.

The other version of the First Street route follows the eastern edge of Beaudry Street, crossing the N. E. corner of the DWP facility. Of the surface routes, this is longest.

First Street will be widened along the north side. The Plan includes a large, landscaped embankment. Ten of the parcels along this alignment will be purchased by the City. For purposes of this exercise, these ten parcels were assumed to be available at no cost to the People Mover.

TUNNEL ROUTE

In operation from 1929 through 1955, the abandoned Pacific Electric Tunnel offers an interesting possibility for use as an exclusive right-of-way for the Bunker Hill People Mover. An in-depth technical analysis was performed to determine the merits of the concept.

Right-of-way through Bunker Hill is available both for the existing E-W route and for the planned N-S route. Passenger transfer will be at the East Hill Station. The N-S boarding platforms will be below the E-W platform. The entire East Hill Station; mezzanine, commercial shops, and lobby areas will be underground, under the park, between Grand and Olive Streets.

Of concern was the elevation difference between the platform level of the N-S station and the tunnel. Figure 3 shows a possible route which includes two high-speed (300' minimum radius) turns. Considering this as the maximum grade situation, a maximum of 6 percent was noted. Six percent has been established as maximum desired.

Figure 2 shows one scheme developed which, ignoring the fact that the tunnel is blocked: (a) provides circulation within Bunker Hill, (b) provides off-site, remote parking for Bunker Hill, and (c) establishes the initial steps towards a N-S leg.

TUNNEL ~ PEOPLE MOVER SYSTEM

- WEST SITE TO CIVIC CENTER
- EAST SITE TO WEST HILL STATION
- TRANSFER AT EAST HILL STATION

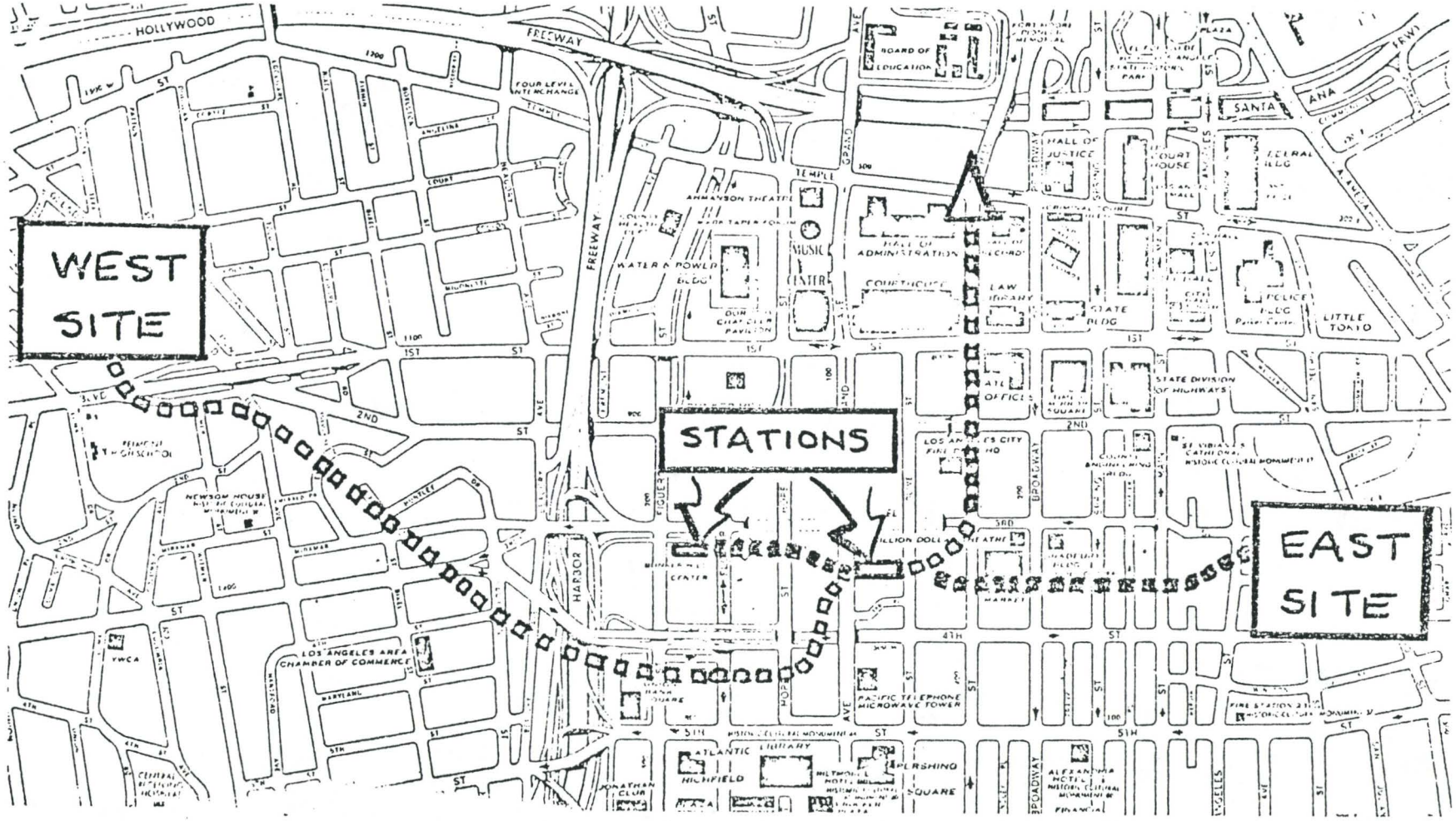


FIGURE 2 PAGE 7

P.E. TUNNEL TO EAST HILL STATION

- GRADE AS SHOWN : 6 % (TO N-S LEVEL)
- ARCO GARAGE INTERFERENCE

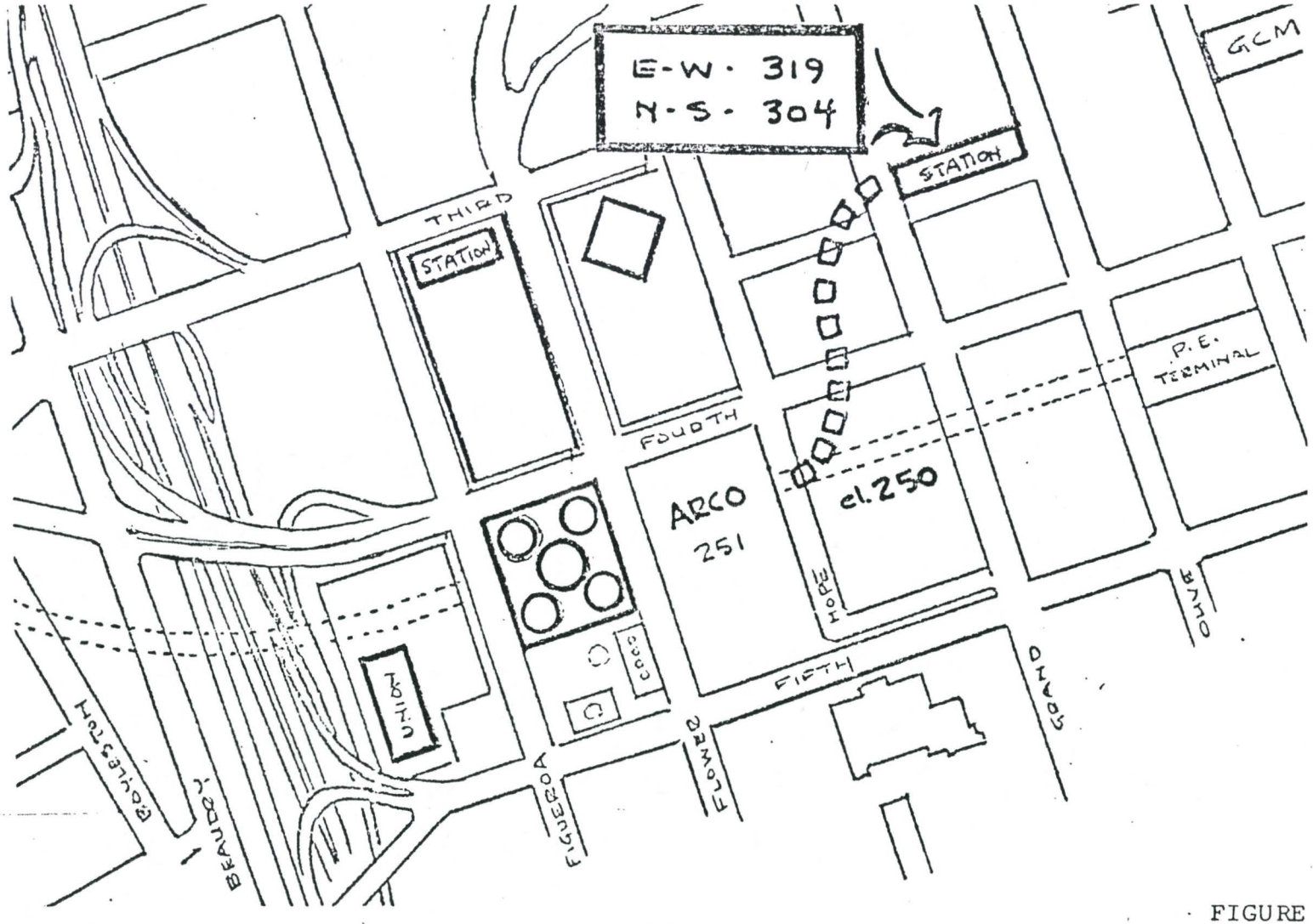


FIGURE 3 PAGE 8

- 083

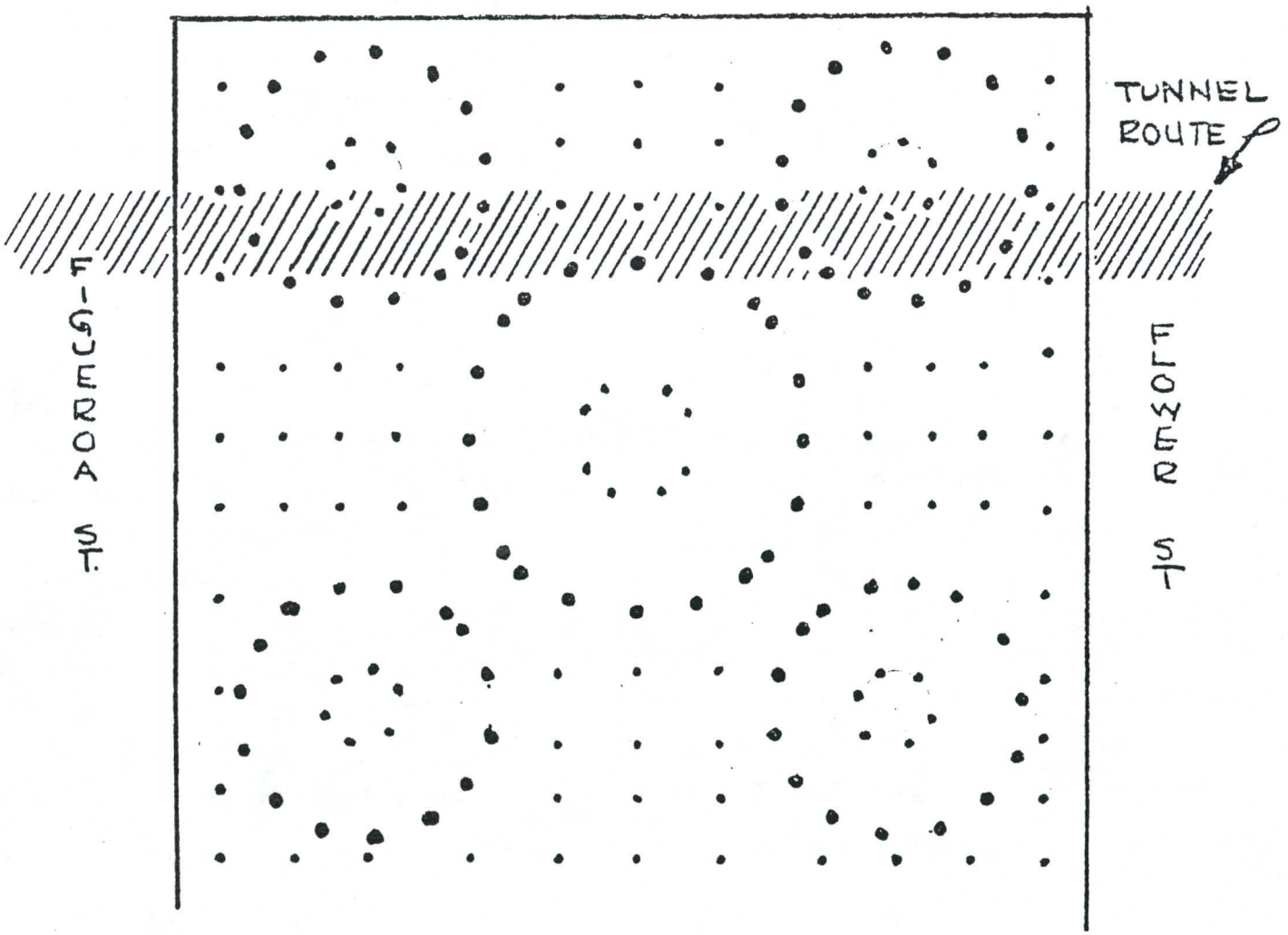
TUNNEL CONDITION

At this time the portion of tunnel between Flower and Hope Streets is occupied by a 2250-car-capacity parking structure. The lowest level of the structure, at EL. 251, is proximate to the former tunnel running level. Detailed examination of the parking structure was not done. However, column interference, loss of parking spaces, plus disturbance of the inclined ramp vehicular movement system provide strong negative impact on structure operation.

Planned for construction between Figueroa and Flower Streets, and between 4th and 5th Streets will be the Portman Hotel. The Design Concept selected for the Hotel includes a central cylinder surrounded by four additional cylinders. Column and footing layout for this complex is shown in Figure 4 "Portman Hotel Sub-structure". It is considered unwise and too costly to attempt to design an easement through this facility.

The tunnel is presently sealed at the west side of Figueroa Street. Movement of the tunnel around the hotel and parking structure is apparently a task to be approached with caution. The Fourth St. Bridge sub-structure, for instance, is sufficiently complex to preclude any serious attempt to weave a tunnel through the footings and caissons.

PORTMAN HOTEL COLUMN LOCATIONS



3.093

FIGURE 4 PAGE 10

TUNNEL ADAPTATION TO BUNKER HILL

West Hill Station Guideway Elevation is at el. 353 ft. Tunnel Floor Elevation at Boyleston Avenue is 287 ft. Ignoring freeway footings, economic impact on Parcel "C", etc. analysis showed it to be possible to redirect the tunnel to the West Hill Station. Turning radii noted in Figure 5 "P. E. Tunnel to West Hill Station" are high-speed. Grade at 4.4 percent is within the desired range. Additional effort was directed at this approach. The goals were to minimize impact on Parcel "C", reduce lineal feet of new tunneling to the minimum and retain guideway gradient within desirable limits.

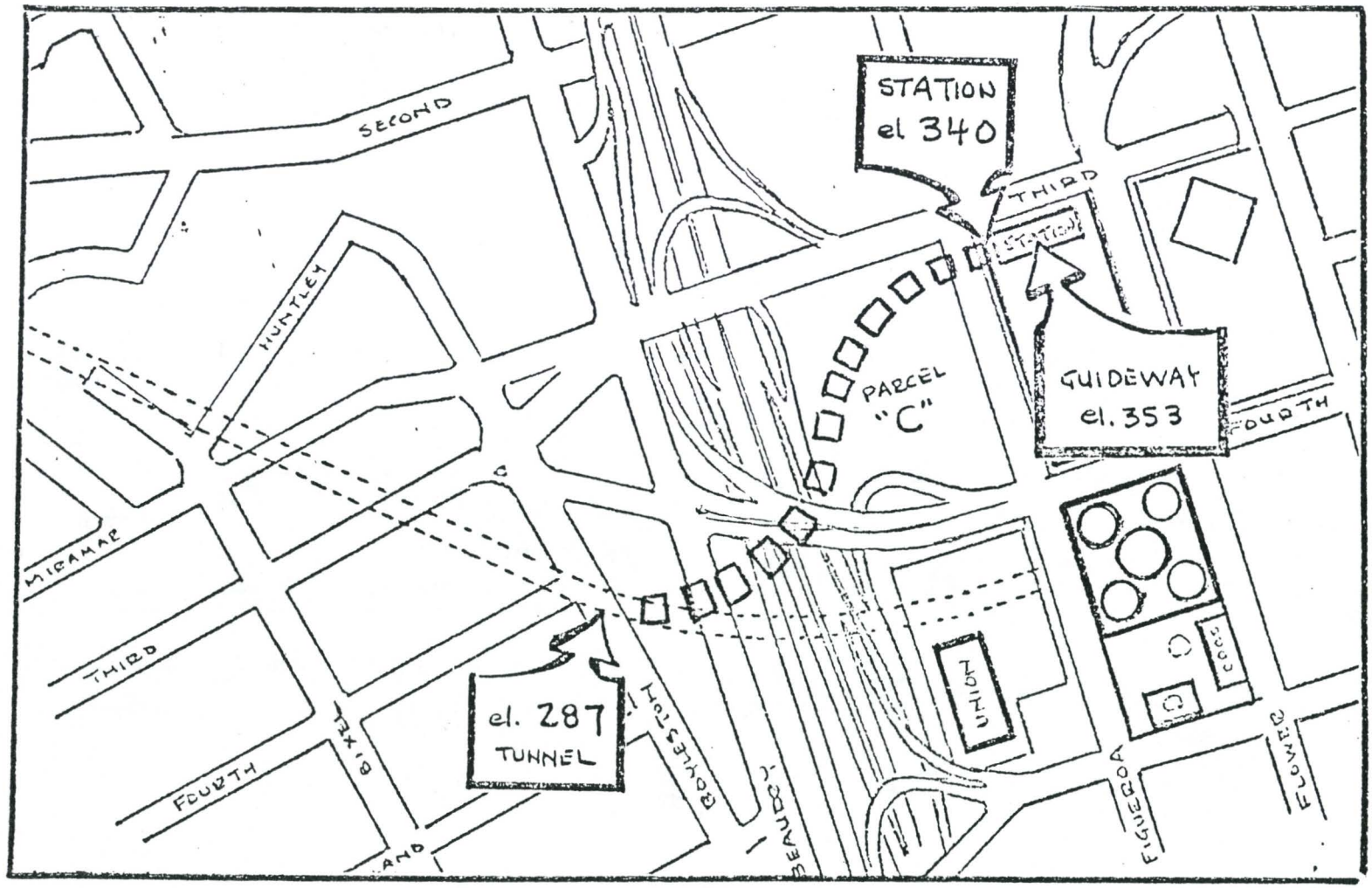
This effort resulted in the scheme shown in Figure 6 "Tunnel Use-Maximum Impact". Starting at the station, a six percent grade was maintained. A 300 ft. radius turn over the N. W. corner of "C" allowed the guideway to intercept the ground level in the vicinity of that corner. At this point the guideway is entrenched, extending south parallel to the Harbor Fwy. Third St. off-ramp--Figure 7 "Harbor Fwy-Tunnel Clearance".

At approximately el. 293 tunneling commences, passing between the sub-structure of the Fourth Street Bridge as shown on Figure 8 "Fourth St. Bridge sub-structure.

Approximately 400 ft. of new tunnel would be required. Blending with the existing tunnel under Beaudry Avenue Freeway footing elevations are at el. 331 ft. Clearance for the tunnel is available, which passes under the freeway at about 280 ft. at the soffit.

P.E. TUNNEL TO WEST HILL STATION

- GRADE AS SHOWN: 4.4%
- ~ 400 FT. RADII
- ~ PARCEL "C" IMPACT



3- 084 A

FIGURE 5 PAGE 12

P.E. TUNNEL USE - MINIMUM IMPACT

- 400 FT. LEVEL TUNNELING UNDER FREEWAY
- 6% MAX GRADE
- INCLINED TRENCH ON "C"

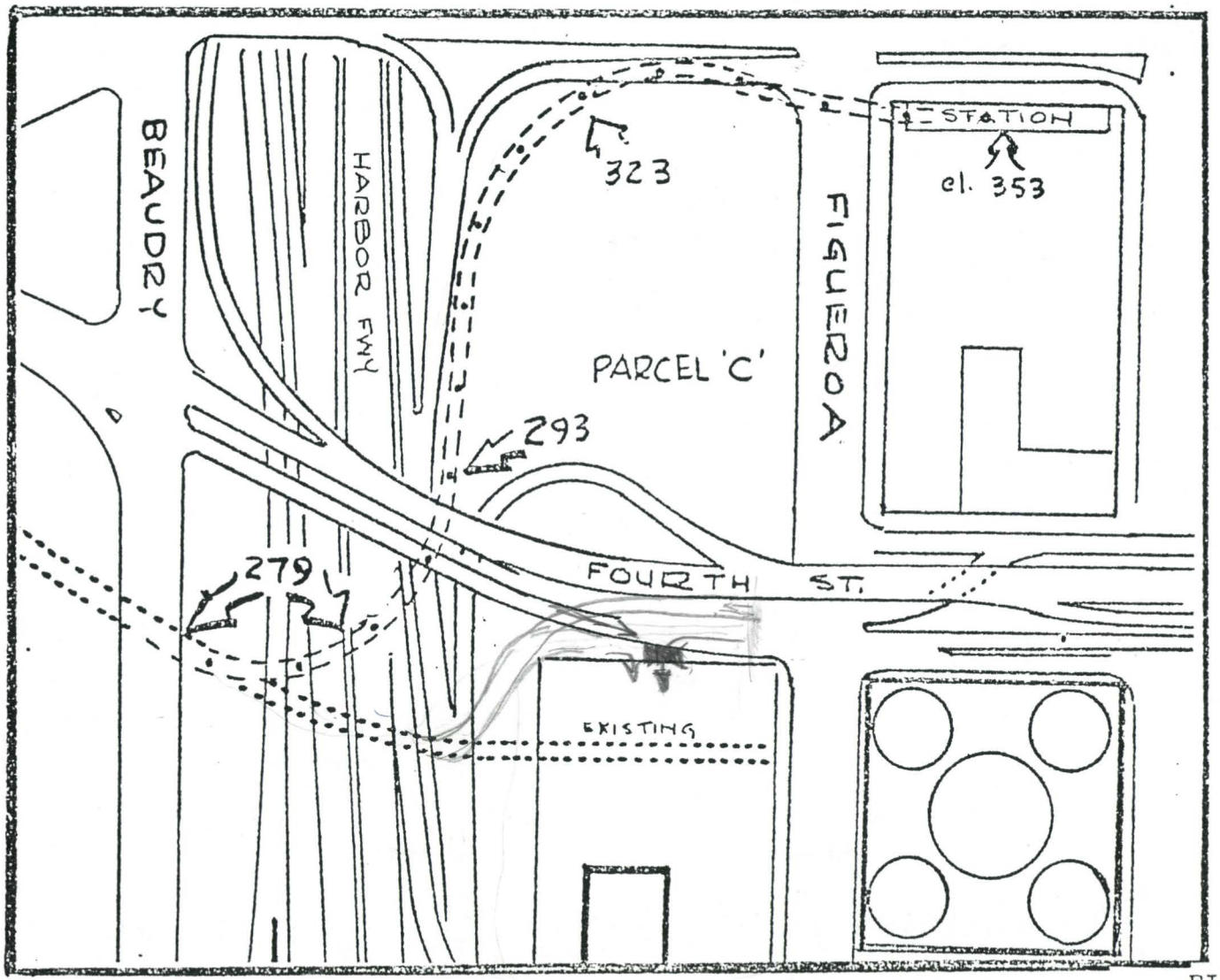
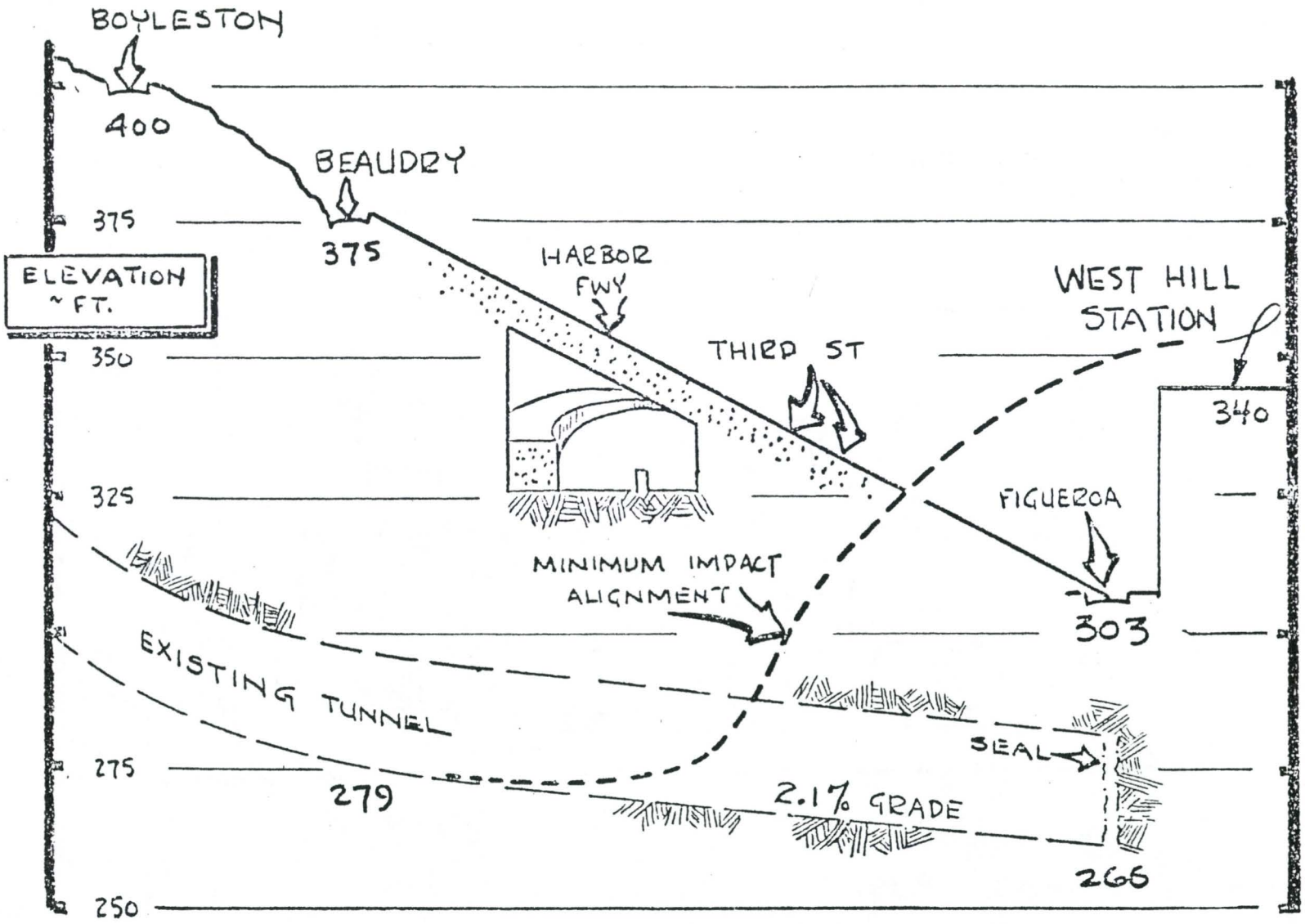


FIGURE 6 PAGE 13

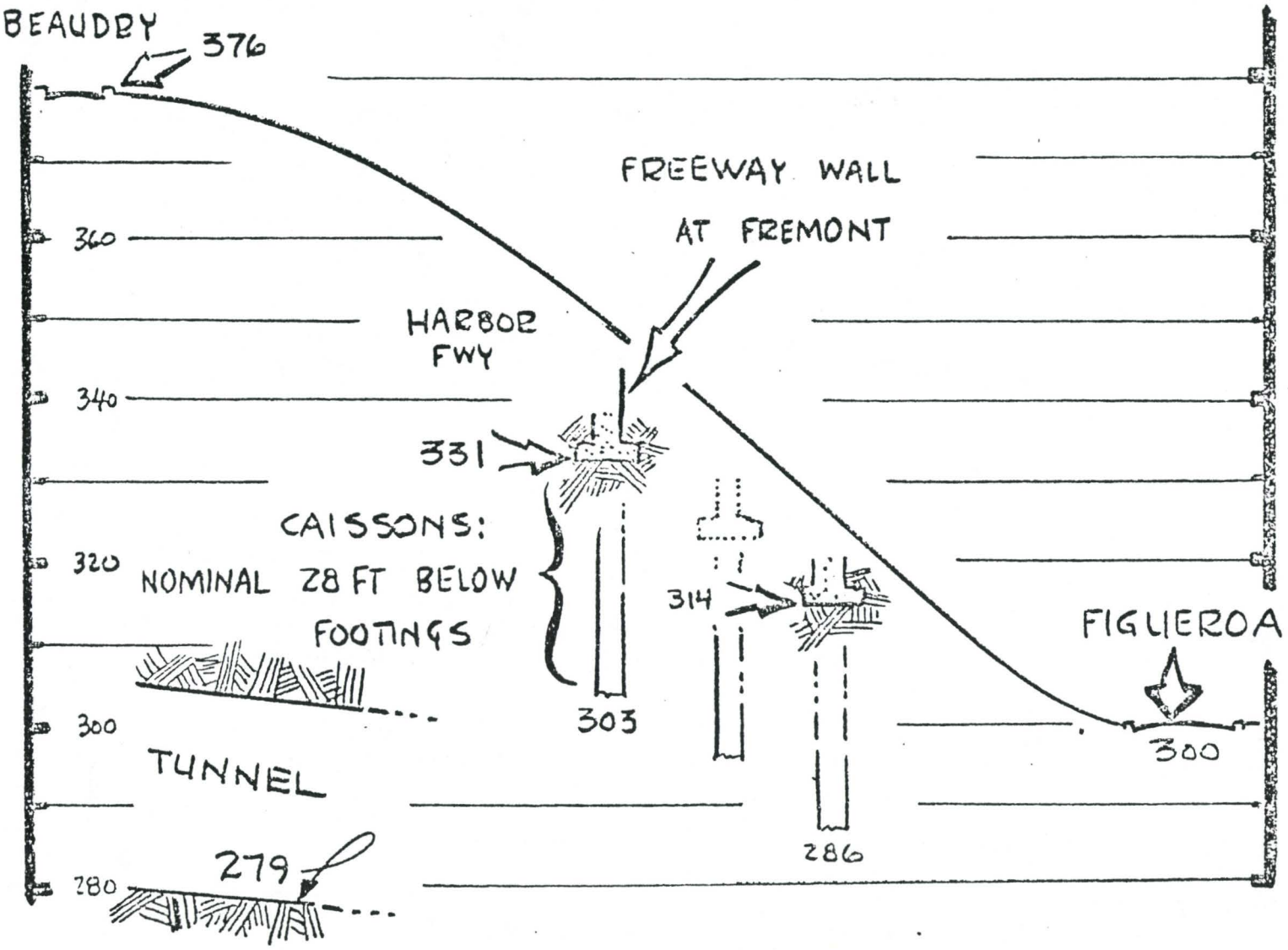
3-085 A

HARBOR FWY. - TUNNEL CLEARANCE



3-086 A

FOURTH ST. BRIDGE SUB-STRUCTURE



TUNNEL PEOPLE MOVER EQUIPMENT INTERFACE

Technical analysis continued after determination that a tunnel to West Hill Station link was possible.

Detailed examination of People Mover vehicle, guideway and tunnel clearances was then undertaken. Preliminary analysis had shown the systems under consideration would fit into the tunnel.

Available People Mover Vehicles vary widely in dimension. There is no national standard. Most will not fit on any guideway but the one designed specifically for the given vehicle.

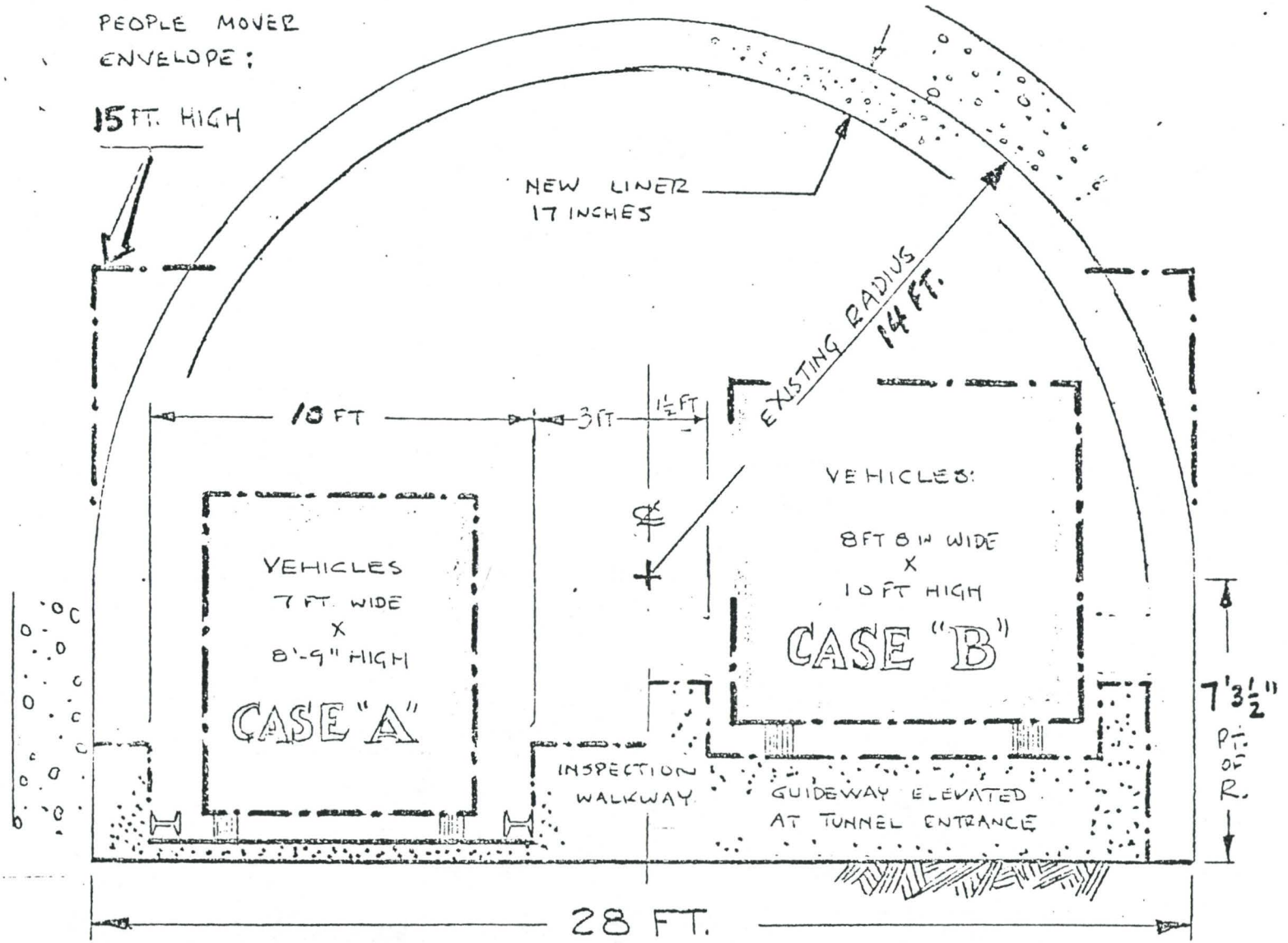
For purposes of this analysis, two vehicles were selected. Case "A" cars, on Figure 9, is typical of the mid-range class, in this case 7 ft. wide by 8 ft. 9 in. high. Class "B" represents the largest probable size at 8ft. 8 in. wide by 10 ft. high. As may be seen on Figure 9, the People Mover envelope of 15 x 28 ft. is larger than the tunnel. When lined, tunnel width will be 25 ft. 2 in. This is a full 2 ft. 10 in. less than the envelope used for the balance of the system.

Tunnel Liner thickness of 17 inches was determined as being required by the Bureau of Engineering after examination of the existing tunnel walls.

It may be noted that in Case "B" the Guideway is pictured as being elevated at the tunnel entrance. This was considered as a method of alleviating the severity of the grade from the Lucas overcrossing down into the tunnel.

By allowing the Guideway to remain elevated as shown in Fig. 10, intersection with the tunnel floor well within the tunnel effectively reduces the Guideway grade to about 5 percent. Specifications should be strengthened to assure smoothness of running surface in the vicinity of the entrance. This will preclude any possibility vehicle/tunnel collision in case of an extreme bounce.

PEOPLE MOVER ~ TUNNEL FIT



-087B

FIGURE 9 PAGE 17

MAXIMUM GRADE INTERSECTION

- GUIDEWAY & TUNNEL FLOOR INTERSECT @ 110 FT IN TUNNEL
- GUIDEWAY ELEVATED FOUR FEET AT ENTRANCE

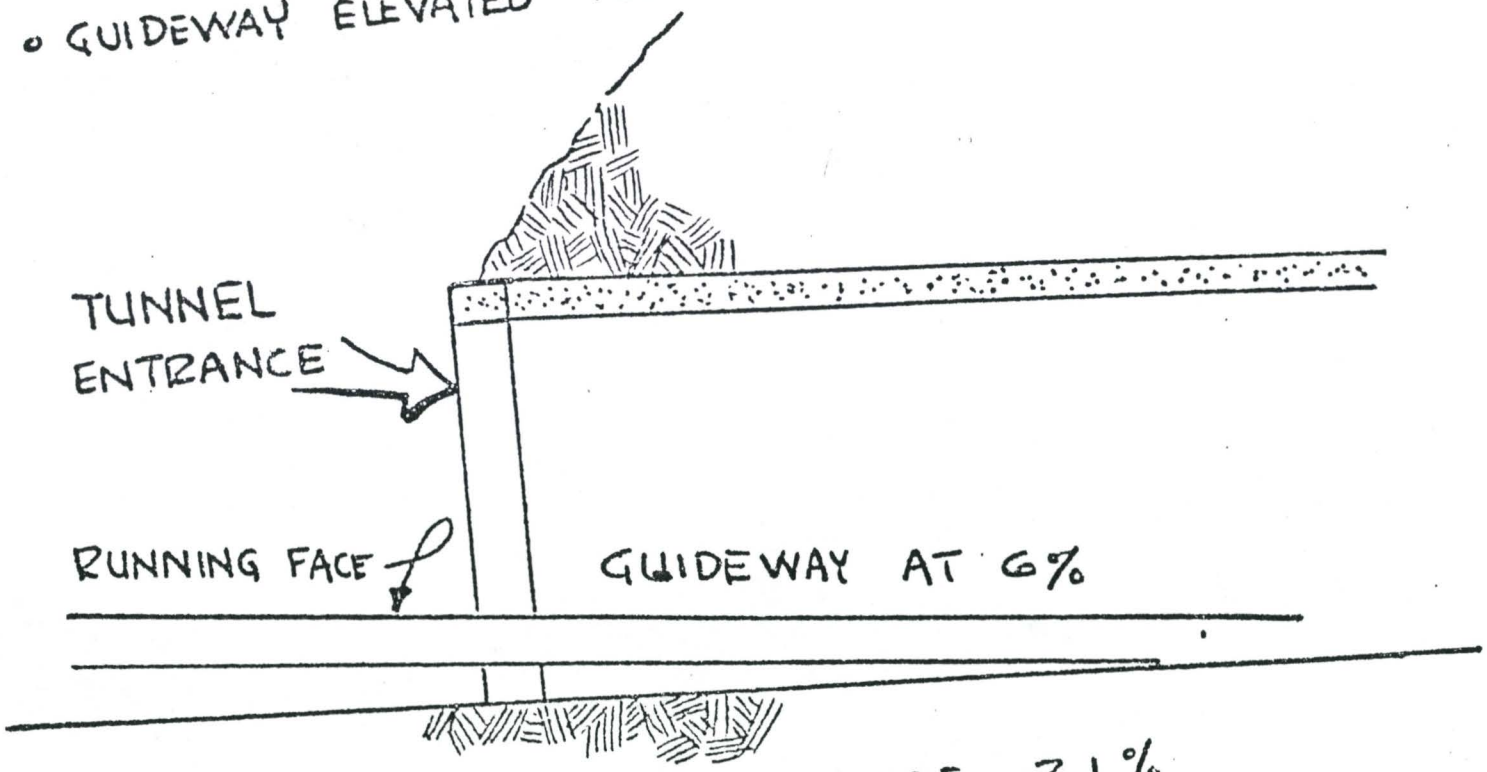


FIGURE 10 PAGE

PARKING STRUCTURE TO TUNNEL

Preliminary viewing of the West Parking Structure Site and its relationship to the tunnel entrance suggested difficulty of Guideway alignment.

Subsequent to selection of Parking Structure Concepts and Detailed Analysis of traffic circulation, sufficient data were avialable to permit "actual" route analysis.

West Terminal Station platform elevation is tentatively at el. 405. Tunnel entrance is el. 319.9. Distance from the platform to the entrance is approximately 1600 ft., as shown in Figure 11, "Guideway Elevation".

Maximum grade apparent in the relatively superficial analysis done in this study was 6% from Lucas Avenue overcrossing to the tunnel.

Maximum column heights appear to be on the order of 25 feet. Figure 12 "Guide-way-Platform to Tunnel" demonstrates an alignment determined as being practical.

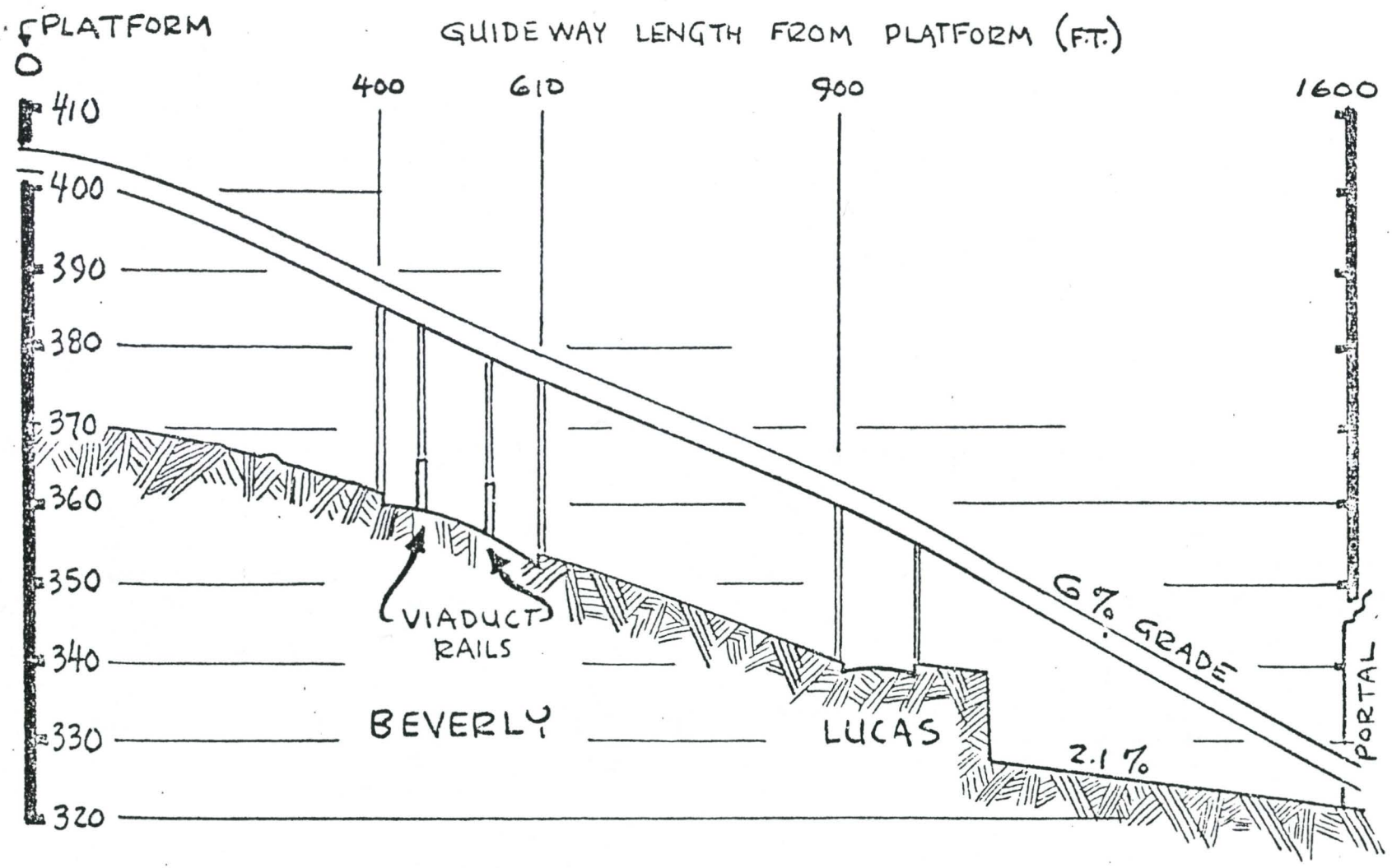
Previous West Site Traffic analysis resulted in a decision to extend the rails of the viaduct, thereby forcing westbound First St. traffic to bypass the first entrance into the parking structure. Cars turning right from Glendale Blvd. or cars coming from Lucas Avenue on Second St. will then not have to contend with viaduct traffic turning into their pattern. Extension of the rails would allow implacement of guideway columns at the rails, thereby reducing Guideway span lengths.

Turning along Beverly between Witmer and Lucas is the entire right-of-way acquisition requirement, five parcels. Some land removal would be necessary as this is the slope of a hill.

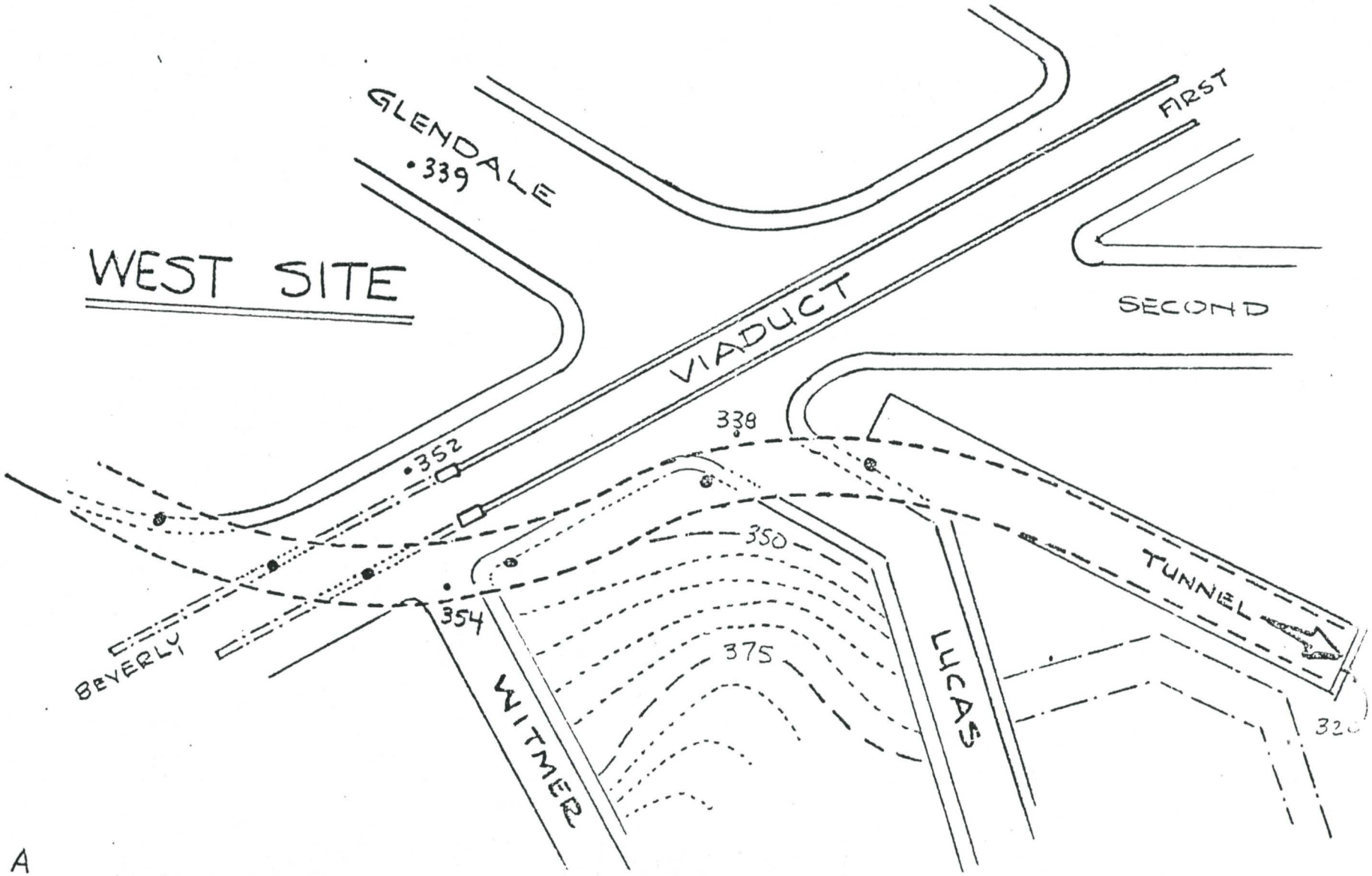
Lucas Street overcrossing must be minimal column height to allow maximum grade reduction into the tunnel. Survey of the site shows that traffic northbound on Lucas Street is going down hill toward the viaduct. There was some concern that the Guideway would visually obstruct the intersection. On-site investigation will show this is not the case. Guideway and viaduct more or less obstruct the same visual angle.

Turning radii shown are 500 ft., well above the 300 ft. minimum desired for the People Mover.

GUIDEWAY ELEVATION



GUIDEWAY- PLATFORM TO TUNNEL



- 091 A

FIGURE 12 PAGE

Economic Comparisons

Construction costs are developed in Table 2. Total lengths of the 1st and 2nd street routes were developed by Daniel-Mann-Johnson and Mendenhall, the tunnel length given was developed by C.R.A. staff.

Tunnel Associated costs used were those generated by Bureau of Engineering, City of Los Angeles and reported January 1971. These costs were not inflated.

CONSTRUCTION COSTS (1000's OF $)

	2 ND ST	1ST - A	1ST B	TUNNEL
TOTAL LENGTH (FT.)	3844	4235	4262	4650
TOTAL ELEVATED (FT.)	3844	4235	4262	1800
TOTAL AT GRADE (FT.)	0	0	0	2850
ELEVATED @ $800 / LINEAL FT. ($)	3,075.2	3.388	3,409.6	1,440.
TUNNEL LINER, TILE, FLOOR (2000 FT.)	-	-	-	1,431
MISC. INCL. SANDBLAST, CEILING	-	-	-	233
LIGHTING	-	-	-	82.5
AIR COND. + VENTILATING	-	-	-	101.0
NEW TUNNEL - 400 FT @ $2800 / FT.	-	-	-	1,112.0
TRENCH - PARCEL 'C' - 450 FT @ $200 / FT	-	-	-	90.0
TOTAL DOLLARS	3,075.2	3,388.0	3,409.6	4,489.5

3-097

TUNNEL RELATED COSTS

For purpose of this analysis it was assumed there would be no cost to CRA for tunnel and tunnel access easement. The City owns a twenty-food-wide access strip from Beverly to the tunnel.

New tunnel cost estimates range from $2000 to $2800 per lineal foot. To the level of accuracy possible in this analysis approximately 400 feet of new tunneling would be required.

Cost of demolition of the old tunnel wall, about 100 feet going from the existing tunnel to the new, was not included.

Cost of lining of the existing tunnel was taken from Ref. B. as were sandblasting and waterproofing, air conditioning, lighting, ventilating and provision of a ceiling.

Cost of slope cut on the South Side of Beverly Blvd., between Lucas & Witmer, was not estimated, as quantity of slope to be removed was not determined. Should this route be seriously considered, assessment of this cost must be made. It is probable that a retaining wall will be necessary and this cost must be included.

Trenching and lining costs on Parcel "C" were not accurately assessed. An average cost of $200 per lineal foot was used.

MAJOR COST FACTORS

As shown in Table 3, summary of key cost factors, the route along Second Street is the shortest. Any deviation from that route results in additional travel time. In order to maintain capability to move 4,000 passengers per hour per terminal, additional vehicles must be put on-line.

Routes 1, 2 & 3 are relatively equivalent in grade, trending down from the platform level of el. 405 ft. in the West Parking structure to el. 353 at the station in the World Trade Center between Figueroa and Flower Streets. The tunnel route, however deviates from this generalization; a grade differential of 73 ft. from the tunnel low-point to the station must be overcome.

Significance of additional route length and grade is summarized on Table 4 - "Additional Annual Costs". Cost of energy is given both for the additional 73 ft. grade and the additional 806 ft. of route length. As noted all costs were inflated at a 4 percent annual rate.

SUMMARY: KEY COST FACTORS

	2ND ST	1ST-A	1ST-B	TUNNEL
ROUTE LENGTHS	3844	4235	4262	4650
ADD'L ROUND TRIP TIME (SECONDS)	0	27	29	56
ADD'L VEHICLES REQ'D	0	2	2	4
FEET OF CLIMB	0	0	0	74

5-095 A

ADDITIONAL ANNUAL COSTS

	2ND ST	1ST-A	1ST-B	TUNNEL
ENERGY (HEIGHT)	0	0	0	$5,450
ENERGY (LENGTH)	0	+	+	15,000
MAINT. PERSONNEL	0	+	+	10,000
MAINT. CONSUMABLES	0	+	+	18,000
MISC. MAINT.	0	+	+	4,550
COST PER YEAR	0	$22,900	$24,600	$53,000
25-YEAR PROGRAM COST: 4% ANNUAL INFLATION	0	$954,968	$1,025,706	$2,207,450

COUNTY OF LOS ANGELES
INTERNAL SERVICES DEPARTMENT
550 South Vermont Ave., Los Angeles, California 90020

illiam F. Stewart
rector

March 9, 1990

Mr. Mark T. Mendoza
Real Estate Division
Los Angeles County Transportation Commission
403 West Eighth Street, Suite 500
Los Angeles, California 90014-3096

Dear Mr. Mendoza:

RECORD OWNER AND ACCESS EASEMENTS FOR SECOND STREET TUNNEL (5152-007-012 & 013)

Pursuant to your request, we have examined the records to determine record ownership and any access easements affecting the subject property. As of February 28, 1990, the record owners are:

EMERALD HILL ASSOCIATES,
a California general partnership,
as to an undivided 79% interest; and

TOLUCA STATION ASSOCIATES,
a California limited partnership,
as to the remainder,

by deeds recorded as Official Records Document No. 85-1501225 on December 20, 1985, and as Official Records Document No. 86-1820588 on December 30, 1986.

The address for both partnerships is shown as:

c/o Mr. Tye Rubins
136 South Palm Drive
Beverly Hills, California 90212

A Certificate of Limited Partnership for Toluca Station Associates, recorded as Official Records Document No. 85-1501223, shows the name and address of the general partner to be:

Tye Rubins
136 South Palm Drive, #401
Beverly Hills, California 90212

An Amended Certificate of Limited Partnership for Toluca Station Associates, recorded as Official Records Document No. 85-1501224 on December 20, 1985, recites, in part, as follows:

> "Any document or instrument conveying or purporting or attempting to convey...this partnership's interest in any real property...shall, to be effective for any purpose whatsoever, be signed both by the General Partner and the Limited Partner."

The said amended certificate shows the name of the Limited Partner to be:

> The Dern, Mason & Floum Investment Partnership,

but no address is given and there is no recorded certificate or statement of partnership for the said limited partner.

No statement of partnership appears of record for Emerald Hill Associates, a California general partnership.

We also find, as of February 28, 1990, that The City of Los Angeles is the owner of certain easements affecting the subject property, as conveyed to the City by a document recorded July 6, 1966 in Official Records Book D3357, page 862. These easements are for ingress, egress and working area described as being near "the northerly outside face of the tunnel;" and for "right of access to and from a public street to the terminus of said tunnel," said access easement being further described as 20 feet in width. The said document contains various other covenants and provisions, and reference is made to the document, a copy of which is enclosed.

Very truly yours,

WILLIAM F. STEWART
Director

Daniel F. Navarro
Supervising Title Examiner
Valuation/Acquisition Division

WFS:DFN-gs 37

Enclosure
DFN2NDST/A:42IBM

BK D3357 PG 885

The within instrument approved by the Council of the City of Los Angeles at its meeting of

JUNE

WALTER C. TIMM, City Clerk

By M. Jenkins Deputy

RECORDED AT THE REQUEST OF
THE CITY OF LOS ANGELES

: 3355

PLEASE DELIVER TO:
CITY CLERK MAIL BOX

BK D3357 PG 862

AGREEMENT AND CONVEYANCE

R/W 44000-122

RECORDED IN OFFICIAL RECORDS
OF LOS ANGELES COUNTY, CALIF.
30 Min. Past 3 P.M. JUL 6 1966
RAY E. LEE, County Recorder

FREE 27 A

THE CITY OF LOS ANGELES, hereinafter sometimes called "CITY" and the SOUTHERN PACIFIC COMPANY, hereinafter sometimes called "SOUTHERN PACIFIC", agree, covenant, and convey, as follows:

WHEREAS, Southern Pacific owns the right to maintain, and at this time does maintain, a subsurface tunnel or subway, known as the "Subway Terminal Subway," as well as certain appurtenant structures and facilities, within The City of Los Angeles. Such tunnel has as its easterly terminus the center line of Olive Street. It then runs generally in a westerly direction between Fourth Street and Fifth Street to the vicinity of the Harbor Freeway, at which point it curves in a northwesterly direction and terminates in the vicinity of the intersection of Toluca Street and Emerald Street; and

WHEREAS, said subsurface tunnel or subway was constructed in and beneath privately-owned lands, and in and beneath certain public streets of the City; and

Approved by Recorder NOVA

WHEREAS, the presence of said tunnel under such privately-owned land, including lands presently owned by the Community Redevelopment Agency of The City of Los Angeles within the boundaries of the Bunker Hill Redevelopment Project, and under the public streets of the City, interferes with and prevents the development of such land to its highest and best use, and interferes with the use of such streets; and

Prepared for Recordation By The City Of Los Angeles
[illegible] Bureau Of R/W & Land:

WHEREAS, Southern Pacific, to assist and aid the City and the Community Redevelopment Agency of The City of Los Angeles in their performance of their public functions and purposes, desires to donate and give to the City the Subway Terminal Subway as herein provided:

NOW THEREFORE, the parties agree as follows, and by this document:

1. Southern Pacific hereby quitclaims to the City all its right, title and interest in and to said tunnel, from its easterly terminus to its westerly terminus, as more particularly described in Exhibit "A", including the ventilating shaft presently existing, it being understood that such right, title and interest (except for the ventilating shaft) is of a subsurface right only. Southern Pacific further quitclaims its interest, if any, in a non-exclusive easement in and to the subsurface use of the area beneath the easterly one-half of Olive Street, including use for tunnel purposes and including the use of the circular staircase within said area.

2. Southern Pacific further quitclaims a non-exclusive easement for ingress and egress to and from said tunnel through an existing staircase leading from the tunnel to the surface of the soil immediately to the west of Olive Street, and the right to maintain and use same until such time as the tunnel in that location is destroyed or filled so as to eliminate the need for access and at such time the aforesaid easement for ingress and egress shall immediately terminate; provided that until such time as the easement has terminated, as provided herein, other suitable pedestrian access may be substituted by the owners of said surface at such time as they may desire.

3. That within the tunnel, in the vicinity of Olive Street and in the vicinity of Flower Street there is located and in existence two "sump pumps" utilized to keep said tunnel dry of seepage water. The said two pumps are hereby also sold and conveyed to City.

4. That at the northwesterly terminus of said tunnel (in the vicinity of Toluca Street and Emerald Street) the parcel of real property bounded by Second Street, Lucas Avenue, Emerald Drive, Emerald Street, and Toluca Street, except for the subsurface rights in said tunnel, is not included in this conveyance, except as set forth hereinafter in this section.

(a) Southern Pacific conveys to City an easement for ingress, egress and working area upon that portion of the parcel of real property retained by Southern Pacific, which easement is described as follows:

All those portions of Lots 12 and 13, Tract No. 8704 as per map recorded in Book 116, pages 87 to 88, inclusive, of Maps, in the office of the County Recorder of Los Angeles County, bounded and described as follows:

Beginning at a point in said Lot 12 at which the northerly outside face of the tunnel meets the westerly side of the westerly "wing" of said tunnel; thence northerly along a line in said westerly side of said westerly "wing" and along its northerly prolongation a distance of 50 feet; thence easterly along a line extending easterly at right angles from said northerly prolongation to the northwesterly line of Toluca Street, 60 feet wide as said northwesterly line is shown on the map of said tract; thence southwesterly along said northwesterly line to a line

extending easterly at right angles from the easterly side of the easterly "wing" of said tunnel and which passes through the northerly end of said easterly "wing"; thence westerly along said last mentioned line extending easterly at right angles to the easterly side of the easterly "wing" of said tunnel; thence southerly along said easterly "wing" to said northerly outside face; thence westerly along said northerly outside face to the point of beginning.

(b) Southern Pacific further conveys to City a non-exclusive easement and right of access to and from a public street to the terminus of said tunnel. Said easement and right shall provide a reasonable and adequate access and shall be suitable for use by motor vehicles, including trucks, and shall be twenty (20) feet in width. Said easement shall be presently located upon the presently existing surface of the abandoned railway right of way extending from said tunnel to Second Street. At any time, upon thirty (30) days' written notice, Southern Pacific or its grantees or assigns of said parcel may provide, substitute and construct another easement twenty (20) feet in width which will provide safe, convenient and reasonable access to the tunnel from a public street for motor vehicles, including trucks.

(c) Southern Pacific further agrees to furnish power to and will maintain, for the purpose of draining water from said parcel and from entering the tunnel, a pump located upon said parcel. Should Southern Pacific, or its assigns, determine that it no longer requires said pump for the drainage of said parcel, it shall give City sixty (60) days' notice to such effect and within such period City may elect to take over the

operation of such pump for the purpose of keeping water from entering the tunnel. City shall have, in such event, and without further grant, an easement to operate, maintain and replace (should replacement become necessary) said pump and an easement to maintain necessary ditches or berms to trap surface waters and to divert such waters to the pump.

(d) At such time as the City fills or permanently blockades the northwesterly terminus of the tunnel, so that no entrance may be gained into said tunnel through said northwesterly terminus, and no water may flow into said tunnel at said terminus, all easement rights or other rights in said parcel shall immediately terminate; provided, however, that said tunnel entrance may not be filled or blockaded, nor access thereto destroyed, except by the City or with its permission.

5. That said conveyances do not include and Southern Pacific reserves all oil, gas and mineral rights which it may own or possess, without however, the right to utilize for the extraction thereof any part of the tunnel or to pass through the easements hereby conveyed; until such time as the tunnel structure is filled, removed or destroyed.

6. Upon the effective date of transfer of ownership by donation as herein provided, City assumes all burdens and obligations of ownership. Therefore, because Southern Pacific will no longer be able to maintain or perform work upon or within said tunnel or do any act in connection therewith, City hereby releases Southern Pacific, its successors and assigns, from any obligations in connection therewith, to perform any act upon, within, or in any manner with respect to said tunnel, and therefore, City further accepts the obligations of ownership of said tunnel.

7. No monetary compensation and no consideration is to be paid by the City for the above-mentioned conveyances of the tunnel, easements or appurtenances mentioned above.

8. These conveyances are made as a gift and donation to the City to permit the City to construct and improve its public streets passing over said tunnel and to permit the City to cooperate with the Redevelopment Agency of The City of Los Angeles in the furtherance of the public purposes of said Agency, and particularly, the more economical and speedy development of the Bunker Hill Redevelopment Project in the City of Los Angeles.

9. Southern Pacific is the owner in fee of two parcels through which said tunnel passes. Said parcels are described as follows:

(a) (OLIVE STREET PARCEL)

That certain land conveyed to the Pacific Electric Land Company by deed recorded on March 8, 1923, in Book 1959, page 245 of Official Records, in the office of the County Recorder of said county, said land being described in said deed as follows:

"Beginning at a point on the Westerly line of Olive Street distant 120 feet southerly from the southerly line of Fourth Street; thence southerly along the Westerly line of Olive Street One Hundred Twenty-four and Forty-two hundredths (124.42) feet to the Southeasterly corner of fractional Lot Seven (7), in Block One Hundred Seven (107) of the Bellevue Terrace Tract as per map recorded in Book 2, Page 585, of Miscellaneous Records of said County; thence Westerly along the Southerly line of said fractional

Lot Seven (7) One Hundred Sixty-six and Thirty-two hundredths (166.32) feet to the Southwesterly corner of said Lot; thence Northerly One Hundred Twenty-four and ninety hundredths (124.90) feet to the Northwesterly corner of Lot One (1) in Block "N" of the Mott Tract as per map recorded in Book 1, Page 489, Miscellaneous Records of said County; thence Easterly along the Northerly line of said Lot, One Hundred Sixty-five and Sixty-six hundredths (165.66) feet to the point of beginning."

(b) (BOYLSTON STREET PARCEL)

Lot 5, Block 2, Subdivision "B" of Lot 8 in Block 38, Hancock's Survey (commonly known as the Washington Tract), as per Map recorded in Book 3, pages 46 and 47 of Miscellaneous Records of Los Angeles County.

Within said parcels this conveyance of the tunnel and subsurface rights is determinable; at such time as the tunnel within said parcels is filled, with the authority and under the permission of The City of Los Angeles acting in its proprietary capacity, or access to said tunnel blockaded, all easement rights in said parcels shall cease and terminate and the fee owners of said parcels shall have a right to utilize said parcels, free of any easements conveyed hereby.

As to the Olive Street parcel, access shall be deemed blockaded when the tunnel within the Southwesterly 40 feet of Lot 5, and the Northeasterly 20 feet of Lot 4, in Block N, of the Mott Tract, as per Map recorded in Book 3, p. 7 of Miscellaneous Records of said county, is destroyed, filled or blockaded so as to effectively prevent access from the tunnel within the aforesaid described

portions of Lots 4 and 5, to or through the tunnel beneath the aforesaid Olive Street parcel.

As to the Boylston Street parcel, access shall be deemed blockaded when the tunnel within Lots 4, 6, 7 and 8 of Block 2, Subdivision "B" of Lot 8, Block 38, Hancock Survey, (commonly known as the Washington Tract) is destroyed, filled or blockaded so as to prevent access to or through the tunnel under said Boylston Street parcel.

Nothing contained in this section shall impose upon the City, its successors or assigns, any obligation to fill the tunnel beneath said Olive Street parcel or said Boylston Street parcel, but if the City, its successors or assigns, desires to do so, it may demolish and fill or may fill, partially or wholly, without demolishing the tunnel structure, the tunnel within said Olive Street and Boylston Street parcels; provided, that the City shall not have the right to excavate through the surface of said Olive Street and Boylston Street parcels.

10. This agreement, covenant and conveyance is to be executed in duplicate and acknowledged and then recorded, and upon the approval by the City Council the City may enter said tunnel and may utilize said easements for all uses and purposes, including the destruction, demolition and/or filling of portions of said tunnel, but no obligation is hereby created to destroy, demolish or fill said tunnel and no further instruments or deeds are to be, or need be

executed and delivered to vest in the City the full interests intended to be conveyed hereby.

Dated: [illegible], 1966.

Attest: [illegible], City Clerk

By [illegible]
Deputy

IN DUPLICATE

THE CITY OF LOS ANGELES

By [illegible]
MAYOR

JUN 29 1966

SOUTHERN PACIFIC COMPANY

(CORPORATE SEAL)

By [illegible]
VICE PRESIDENT

ATTEST [illegible]
Assistant Secretary

STATE OF CALIFORNIA,)
: ss.
COUNTY OF SAN FRANCISCO)

On this 24th day of June, A.D. 1966, before me, JOHN E. JURGENS, a Notary Public in and for the said County and State, personally appeared H. J. Nelson, known to me to be the Vice President, and J. F. Ryan, known to me to be the Asst Secretary of the Southern Pacific Company, the Corporation that executed the within Instrument, known to me to be the persons who executed the within Instrument, on behalf of the Corporation herein named, and acknowledged to me that such Corporation executed the same; and acknowledged to me that such Corporation executed the within Instrument pursuant to its by-laws or a resolution of its Board of Directors.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

[illegible]
Notary Public in and for said County and State.

JOHN [illegible]
NOTARY PUBLIC [illegible]

Approved as to form and legality
JUN 28 1966
ROBERT [illegible]
City Attorney
By [illegible]
Deputy

BK D335 PG 871

State of California
County of Los Angeles } ss.

On this 26th day of June, in the year 1964

before me IRVIN WALDER, the undersigned, a Notary Public in and for said State, personally appeared SAM YORTY

known to me to be MAYOR of The City of Los Angeles, a Municipal corporation and known to me to be the person who executed the within instrument on behalf of said public corporation, agency or political subdivision, and acknowledged to me that such Municipal corporation executed the same.

WITNESS my hand and official seal.

IRVIN WALDER
NOTARY PUBLIC, CALIFORNIA
PRINCIPAL OFFICE IN
LOS ANGELES COUNTY

Signature [signature]

IRVIN WALDER
Name (Typed or Printed)

My Commission Expires February 7, 1969

EXHIBIT A

Sub-surface rights only as reserved or otherwise owned by Southern Pacific Company for the purpose of constructing a tunnel or tunnels and appurtenant facilities within the following described real property situate in the City of Los Angeles, County of Los Angeles, State of California, described as follows:

PARCEL 1.

That certain land conveyed to the Pacific Electric Land Company by deed recorded on March 8, 1923, in Book 1959, page 245 of Official Records, in the office of the County Recorder of said county, said land being described in said deed as follows:

"Beginning at a point on the Westerly line of Olive Street distant 120 feet southerly from the southerly line of Fourth Street; thence southerly along the Westerly line of Olive Street One Hundred Twenty-four and Forty-two hundredths (124.42) feet to the Southeasterly corner of fractional Lot Seven (7), in Block One Hundred Seven (107) of the Bellevue Terrace Tract as per map recorded in Book 2, Page 585, of Miscellaneous Records of said County; thence Westerly along the Southerly line of said fractional Lot Seven (7) One Hundred Sixty-six and Thirty-two hundredths (166.32) feet to the Southwesterly corner of said Lot; thence Northerly One hundred Twenty-four and ninety hundredths (124.90) feet to the Northwesterly corner of Lot One (1) in Block "N" of the Mott Tract as per map recorded in Book 1, Page 489, Miscellaneous Records of said County; thence Easterly along the Northerly line of said Lot, One Hundred Sixty-five and Sixty-six hundredths (165.66) feet to the point of beginning."

The sub-surface rights conveyed above within Parcel 1 do not include any right, title, or interest in or to any basement, structure or real property, except the existing tunnel, and except as set forth in Paragraph 2 of this Agreement and Conveyance.

Together with that portion of the northwesterly 40 feet of Olive Street, 80 feet wide, as shown on the map of said Mott Tract, which would pass with a conveyance of said land.

PARCEL 2.

The southwesterly 40 feet of Lot 5, and the northeasterly 20 feet of Lot 4, in Block N, of the Mott Tract, as per map recorded

in Book 32, page 7 of Miscellaneous Records of said county.

Together with that portion of the southeasterly 40 feet of Grand Avenue, 80 feet wide, formerly Charity Street, as shown on the map of said Mott Tract, which would pass with a conveyance of the above-described parcel.

PARCEL 3.

That portion of Block M of the Mott Tract, which is shown as Lots "B" and "C" on the map attached to deed recorded in Book 2329, page 278 of Deeds, records of said county.

Together with that portion of the northwesterly 40 feet of Grand Avenue, 80 feet wide, as shown on said map recorded in Book 2329, page 278 of Deeds, which would pass with a conveyance of the above-described parcel.

PARCEL 4.

All of Lots 8 and 9, and the northeasterly 35 feet of Lot 7, in Block M, of the Mott Tract, as per map recorded in Book 32, page 7 of Miscellaneous Records of said county.

Together with that portion of the southeasterly 40 feet of Hope Street, 80 feet wide, as shown on the map of said Mott Tract, which would pass with a conveyance of the above-described parcel.

PARCEL 5.

Lots 5, 11, 12 and 13, in Block T, of the Mott Tract, as per map recorded in Book 14, page 7 of Miscellaneous Records of said county.

Together with that portion of the northwesterly 40 feet of Hope Street, 80 feet wide; and, also that portion of the southeasterly 40 feet of Flower Street, 80 feet wide, both as shown on the map of said Mott Tract, which would pass with a conveyance of the above-described parcel.

PARCEL 6.

All of Lots 6, 7, 16 and 17, and the southeasterly 120 feet of Lots 8 and 9, in Block Z, of the Mott Tract, as per map recorded in Book 14, page 7 of Miscellaneous Records of said county.

EXCEPTING from said Lot 9 the northeasterly 34 feet of the southeasterly 120 feet thereof.

RECORDER'S MEMO

Together with that portion of the northwesterly 40 feet of Flower Street, 80 feet wide; and, also that portion of the southeasterly 40 feet of Figueroa Street, 80 feet wide, formerly Grasshopper Street, both as shown on the map of said Mott Tract, which would pass with a conveyance of the above-described parcel.

PARCEL 7.

Lots 7, 8, 17 and 18, in Block 13, of the Subdivision of Lots 500, 501, 502 and 503 of the Reservoir Lands (commonly known as the Woolen Mill Tract), as per map recorded in Book 42, page 409 of Deeds, records of said county.

Together with that portion of the northwesterly 40 feet of Figueroa Street, 80 feet wide, formerly Grasshopper Street; and, also that portion of the southeasterly 40 feet of Fremont Avenue, 80 feet wide, both as shown on the map of said Reservoir Lands, which would pass with a conveyance of the above-described parcel.

PARCEL 8.

All of Lot 3, in Block 14, of the Subdivision of Lots 500, 501, 502 and 503 of the Reservoir Lands, as per map recorded in Book 42, page 409 of Deeds, records of said county; and, also that portion of Lot 4, in said Block 14, included within the following described boundaries:

Beginning at the most northerly corner of said Lot 4; thence southeasterly along the northeasterly line of said Lot 4 a distance of 107.72 feet to a point; thence southeasterly along a curve concave northeasterly and having a radius of 1121.01 feet, a distance of 57.74 feet to a point in the southeasterly line of said Lot 4, distant southwesterly 7.54 feet from the most easterly corner thereof; thence southwesterly along said southeasterly line, 50.24 feet to a point; thence northwesterly along a curve concave northeasterly and having a radius of 1171.01 feet (the radial line at the intersection of last-mentioned curve with the southeasterly line of said Lot 4 having a bearing of North 43°52'04" East), a distance of 166.98 feet to a point in the northwesterly line of said Lot 4, distant southwesterly [illegible] feet from the most northerly corner of said Lot 4; thence

northeasterly along said northwesterly line, 29.14 feet to the point of beginning.

Together with that portion of the northwesterly 40 feet of Fremont Avenue, 80 feet wide, as shown on the map of said Reservoir Lands, which would pass with a conveyance of the above-described parcel.

PARCEL 9.

That portion of Lot 5, in Block 14, of the Subdivision of Lots 500, 501, 502 and 503 of the Reservoir Lands, as per map recorded in Book 42, page 409 of Deeds, records of said county, included within the following described boundaries:

Beginning at a point in the southwesterly line of said Lot 5, distant northwesterly 57.25 feet from the most southerly corner thereof; thence northwesterly along said southwesterly line 62.72 feet to the most westerly corner of the southerly 40 feet of the East 120 feet of said Lot 5; thence northeasterly along the northwesterly line of the southerly 40 feet of the East 120 feet of said Lot 5, a distance of 11.73 feet to the beginning of a curve concave northeasterly and having a radius of 1121.01 feet (the radial line at the beginning of said curve having a bearing of North 50° 20' 18" East); thence southeasterly along said curve, 63.83 feet to the point of beginning.

PARCEL 10.

All of Lot 10 and the northeasterly 20 feet of Lot 9, in Block 14, of the Subdivision of Lots 500, 501, 502 and 503 of the Reservoir Lands, as per map recorded in Book 42, page 409 of Deeds, records of said county; and, also those portions of Lots 5, 11 and 12, in said Block 14, included within the following described boundaries:

Beginning at a point in the southwesterly line of Lot 5, distant southeasterly thereon 45 feet from the most westerly corner of said Lot 5; thence northwesterly along said southwesterly line and along the southwesterly line of Lot 11 a distance of 210 feet to the most westerly corner of said Lot 11; thence northeasterly along the northwesterly lines of Lots 11 and 12 a distance of 79.35 feet;

thence southeasterly, along a non-tangent curve concave to the Northeast and having a radius of 1121.01 feet, to a certain point in a line parallel with the northwesterly line of said Lot 5, said parallel line being distant southeasterly 45 feet, measured at right angles from said northwesterly line, and the said certain point being distant northeasterly 11.73 feet from the southwesterly line of said Lot 5, measured along the said parallel line; thence southwesterly along said parallel line a distance of 11.73 feet to the point of beginning.

Together with that portion of the southeasterly 40 feet of Beaudry Avenue, 80 feet wide, as shown on the map of said Reservoir Lands, which would pass with a conveyance of the above-described [illegible].

Parcel 11.

All of Lots 7 and 8, the northeasterly 19 feet of Lot 6 and the southwesterly 25 feet of Lot 9 (measured along the southeasterly line of said Lot 9), in Block 15, of the Subdivision of Lots 500, 501, 502 and 503 of the Reservoir Lands, as per map recorded in Book 42, page 409 of Deeds, records of said county; and, also that portion of said Lot 6 within the following described boundaries:

Beginning at the intersection of the southeasterly line of above-mentioned Lot 6 with a line which is parallel with and 41 feet distant northeasterly, measured at right angles from the southwesterly line of said Lot 6; thence southwesterly along the southeasterly line of said Lot 6 a distance of 39.45 feet; thence northwesterly along a curve concave northeasterly and having a radius of 1171.01 feet, a distance of 82.12 feet to a point in the above-mentioned line which is parallel with and 41 feet distant northeasterly from the southwesterly line of said Lot 6, said last-mentioned point being distant northwesterly along said parallel line, 71.97 feet from the southeasterly line of said Lot 6; thence southeasterly along said parallel line, 71.97 feet to the point of beginning.

Together with that portion of the northwesterly 40 feet of [illegible]ry Avenue, 80 feet wide; and, also that portion of the southwesterly 46.75 feet of Boylston Street, 93.50 feet wide, both as

shown on the map of said Reservoir Lands, which would pass with a conveyance of the above-described parcel.

PARCEL 12.

All of Lot 5 and a portion of Lot 6, in Block 2, of Subdivision "B" of Lot 8 in Block 38, Hancock's Survey (commonly known as the Washington Tract), as per map recorded in Book 3, pages 46 and 47 of Miscellaneous Records of said county; said portion of Lot 6 being more particularly described as follows:

Beginning at the most southerly corner of said Lot 6; thence northwesterly along the southwesterly line of said lot, 40.42 feet to a point; thence northerly in a direct line, 61.58 feet to a point in the northeasterly line of said lot, distant southeasterly 39.08 feet from the most northerly corner thereof; thence southeasterly along said northeasterly line, 61.78 feet to a point; thence southerly in a direct line, 25.59 feet to a point in the southeasterly line of said lot, distant southwesterly 20.71 feet from the most easterly corner thereof; thence southwesterly along said southeasterly line, 29.12 feet to the point of beginning.

Together with that portion of Fourth Street, 60 feet wide; and also that portion of the northwesterly 46.75 feet of Boylston Street, 93.50 feet wide, both as shown on the map of said Subdivision "B", which would pass with a conveyance of the above-described parcel.

RESERVING unto the Grantor, its successors or assigns, the fee title of said Lot 5.

PARCEL 13.

Portions of Lots 3, 4, 7 and 8, in Block 2, of Subdivision "B" of Lot 8 in Block 38, Hancock's Survey, as per map recorded in Book 3, pages 46 and 47 of Miscellaneous Records of said county; said portions of said lots being more particularly described respectively as follows:

Beginning at the most westerly corner of said Lot 3; thence northeasterly along the northwesterly line of said lot, 37.88 feet; thence southeasterly in a direct line to a point in the southwesterly line of said lot, distant southeasterly thereon 27.77 feet from the most westerly corner of said lot; thence northwesterly along said

southwesterly line, 27.77 feet to the point of beginning; being a portion of Lot 3.

Beginning at the most northerly corner of said Lot 4; thence southeasterly along the northeasterly line of said lot, 27.77 feet; thence southerly in a direct line, 61.59 feet to a point in the southwesterly line of said Lot 4, distant southeasterly thereon 64.32 feet from the most westerly corner of said lot; thence northwesterly along said southwesterly line, 64.32 feet to the said most westerly corner; thence northeasterly along the northwesterly line of said lot, 49.85 feet to the point of beginning; being a portion of Lot 4.

Beginning at a point in the northwesterly line of said Lot 7, distant southwesterly along said northwesterly line 32.57 feet from the most northerly corner of said lot; thence southerly in a direct line, 97.77 feet to a point in the southeasterly line of said lot, distant southwesterly 111.68 feet from the most easterly corner of said lot; thence southwesterly along said southeasterly line, 37.88 feet to the most southerly corner of said lot; thence northwesterly along the southwesterly line of said lot, 34.01 feet; thence northerly in a direct line 40.45 feet to a point in the northwesterly line of said lot, distant northeasterly 32.73 feet from the most westerly corner thereof; thence northeasterly along said northwesterly line, 54.26 feet to the point of beginning; being a portion of Lot 7.

Beginning at the most easterly corner of said Lot 8; thence southwesterly along the southeasterly line of said lot a distance of 46.39 feet; thence northerly in a direct line 57.32 feet to a point in the northeasterly line of said lot, distant southeasterly 24.00 feet from the most northerly corner thereof; thence southeasterly along said northeasterly line a distance of 34.01 feet to the point of beginning; being a portion of Lot 8.

PARCEL 11.

Portions of Lots 9 and 11, in Block 2, of Subdivision "B" of Lot 8 in Block 38, Hancock's Survey, as per map recorded in Book 3, pages 46 and 47 of Miscellaneous Records of said county; said portions of said lots being more particularly described as follows:

Beginning at the most northerly corner of Lot 9; thence southeasterly along the northeasterly line of said lot, 34.12 feet to a point; thence southerly in a direct line, 40.26 feet to a point in the southwesterly line of said lot, distant southwesterly 32.57 feet from the most easterly corner thereof; thence southwesterly along the southeasterly line of said lot, 84.26 feet to a point; thence northerly in a direct line, 97.76 feet to a point in the northwesterly line of said lot, distant northeasterly 111.85 feet from the most westerly corner thereof; thence northeasterly along said northwesterly line, 37.73 feet to the point of beginning; being a portion of Lot 9.

Beginning at the most easterly corner of Lot 11; thence southwesterly along the southeasterly line of said lot, 37.73 feet; thence northerly in a direct line, 46.63 feet to a point in the northeasterly line of said lot, distant northwesterly thereon 27.68 feet from the most easterly corner of said lot; thence southeasterly along said northeasterly line, 27.68 feet to the point of beginning; being a portion of Lot 11.

Together with that portion of the southwesterly 30 feet of Third Street, 60 feet wide, formerly Crown Hill Avenue, as shown on the map of said Subdivision "B", which would pass with a conveyance of the above-described parcel.

PARCEL 15.

All of Lots 14 and 16, the southeasterly 8 feet of Lot 18 and a portion of Lot 12, in Block 1, of the Compromise Subdivision, as per map recorded in Book 66, pages 35 and 36 of Miscellaneous Records of said county; said portion of Lot 12 being more particularly described as follows:

Beginning at the most westerly corner of Lot 12; thence northeasterly along the northwesterly line of said lot, 65.66 feet to a point; thence southerly in a direct line, 81.15 feet to a point in the southwesterly line of said lot, distant 9.33 feet northwesterly from the most southerly corner thereof; thence northwesterly along said southwesterly line, 48.17 feet to the point of beginning.

Together with that portion of the northeasterly 30 feet of Third Street, 60 feet wide, formerly Crown Hill Avenue, as shown on the map of said Compromise Subdivision, which would pass with a conveyance of the above-described parcel.

PARCEL 16

All of Lots 4 and 5, and the southeasterly 45 feet of Lot 3, in Block 1, of the Compromise Subdivision, as per map recorded in Book 66, pages 35 and 36 of Miscellaneous Records of said county.

Together with that portion of the southwesterly 25 feet of Miramar Street, 50 feet wide, formerly Third Street, as shown on the map of said Compromise Subdivision, which would pass with a conveyance of the above-described parcel.

PARCEL 17.

Portions of Lots 3 and 4, in Block "U", of Subdivision of Lot 1 in Block 38, Hancock's Survey and part of the Woolen Mill Tract, as per map recorded in Book 6, page 115 of Miscellaneous Records of said county; said portions of said Lots 3 and 4 being more particularly described as follows:

Beginning at the northeasterly corner of Lot 3; thence southerly along the easterly line of said Lot 3 to the southeasterly corner thereof; thence northwesterly along the southwesterly line of said Lot 3 a distance of 26.49 feet; thence northerly in a direct line to a point in the North line of said Lot 3, said point being distant westerly along said North line 37.58 feet from the northeasterly corner of said Lot 3; thence easterly along said North line, 37.58 feet to the point of beginning; being a portion of Lot 3.

Beginning at a point in the southwesterly line of Lot 4, distant southeasterly along said southwesterly line 36.64 feet from the southwesterly corner of said Lot 4; thence northwesterly along said southwesterly line, 36.64 feet to said southwesterly corner of said Lot 4; thence northerly along the westerly line of said Lot 4 to the northwesterly corner of said Lot 4; thence easterly along the northerly line of said Lot 4, a distance of 13.16 feet; thence southerly in a direct line to the point of beginning; being a portion of Lot 4.

Together with that portion of the northeasterly 25 feet of Miramar Street, 50 feet wide, formerly Third Street; and, also that portion of the southerly 25 feet of Huntley Drive, 50 feet wide, formerly Sapphire Street, both as shown on the map of said Subdivision of Lot 1, which would pass with a conveyance of the above-described parcel.

PARCEL 18.

Lots 27 and 28, in Block "T", of Subdivision of Lot 1 in Block 38, Hancock's Survey and part of the Woolen Mill Tract, as per map recorded in Book 6, page 115 of Miscellaneous Records of said county.

Together with that portion of the northerly 25 feet of Huntley Drive, 50 feet wide, formerly Sapphire Street; and, also that portion of the southerly 10 feet of the alley, 20 feet wide, adjoining the above-described parcel on the North, both as shown on the map of said Subdivision of Lot 1, which would pass with a conveyance of the above-described parcel.

PARCEL 19.

Portions of Lots 24, 25, 26 and 50, in Block "T", of Subdivision of Lot 1 in Block 38, Hancock's Survey and part of the Woolen Mill Tract, as per map recorded in Book 6, page 115 of Miscellaneous Records of said county; said portions of said lots being more particularly described respectively as follows:

Beginning at the southwesterly corner of said Lot 24; thence northerly along the westerly line of said Lot 24 to the northwesterly corner thereof; thence easterly along the northerly line of said Lot 24 a distance of 11.54 feet; thence southerly in a direct line 50.64 feet to a point in the southerly line of said Lot 24, distant easterly along said southerly line 23.27 feet from the southwesterly corner of said Lot 24; thence westerly along said southerly line 23.27 feet to the point of beginning; being a portion of Lot 24.

Beginning at the northwesterly corner of said Lot 25; thence easterly along the northerly line of said Lot 25 a distance of 23.27 feet; thence southerly in a direct line 50.64 feet to a point in the southerly line of said Lot 25, distant easterly along said southerly

line 35.04 feet from the southwesterly corner of said Lot 25; thence westerly along said southerly line 35.04 feet to the said southwesterly corner; thence northerly along the westerly line of said Lot 25 a distance of 50 feet to the point of beginning; being a portion of Lot 25.

Beginning at the northwesterly corner of said Lot 26; thence easterly along the northerly line of said lot a distance of 35.04 feet; thence southerly in a direct line 50.64 feet to a point in the southerly line of said Lot 26, distant easterly along said southerly line 46.80 feet from the southwesterly corner of said Lot 26; thence westerly along said southerly line 46.80 feet to said southwesterly corner; thence northerly along the westerly line of said Lot 26 a distance of 50 feet to the point of beginning; being a portion of Lot 26.

Beginning at the intersection of the southerly line of said Lot 50 with the westerly line of said Lot 24; thence westerly along the said southerly line of Lot 50 a distance of 39.7 feet to a point; thence northerly in a direct line 75.42 feet to a point in the southeasterly line of Lot 14, in above-mentioned Block "T", distant southwesterly along said southeasterly line 2.77 feet from the most easterly corner of said Lot 14; thence northeasterly and easterly along the northerly line of said Lot 50 a distance of 51.22 feet; thence southerly in a direct line 94.26 feet to a point in said southerly line of Lot 50, distant easterly along said southerly line 11.54 feet from the northwesterly corner of above-mentioned Lot 24; thence westerly along said southerly line 11.54 feet to the point of beginning; being a portion of Lot 50.

Together with that portion of the northerly 10 feet of the alley, 20 feet wide, adjoining the above-described parcel on the South; and, also that portion of Bixel Street, 50 feet wide, both as shown on the map of said Subdivision of Lot 1, which would pass with a conveyance of the above-described parcel.

Parcel 20.

Those portions of Lots 14, 15, 16 and 17, in Block "T", of Subdivision of Lot 1 in Block 36, Hancock's Survey and part of the

Woolen Mill Tract, as per map recorded in Book 6, page 115 of Miscellaneous Records of said county, included within a strip of land 50 feet in width, particularly described as follows:

Beginning at the southeasterly corner of above-mentioned Lot 16; thence westerly and southwesterly along the southerly line of said Lot 16 and the southeasterly lines of above-mentioned Lots 15 and 14, a distance of 51.22 feet to a point, distant 2.77 feet southwesterly along said southeasterly line of Lot 14 from the most easterly corner of said Lot 14; thence northerly in a direct line 124.87 feet to a point in the northwesterly line of said Lot 15, distant westerly along said northwesterly line 3.96 feet from the most northerly corner of said Lot 15; thence northeasterly and easterly along said northwesterly line of Lot 15 and the northerly line of said Lot 16, a distance of 50.22 feet to a point, distant 3.74 feet westerly along said northerly line from the northeasterly corner of said Lot 16; thence southerly in a direct line 120.4 feet to a point in the southerly line of above-mentioned Lot 17, distant easterly along said southerly line 4.79 feet from the southeasterly corner of said Lot 16; thence westerly along said southerly line of Lot 17 a distance of 4.79 feet to the point of beginning.

Together with that portion of the southerly 25 feet (measured radially) of Emerald Street, 50 feet wide, as shown on the map of said Subdivision of Lot 1, which would pass with a conveyance of the above-described 50-foot strip of land.

PARCEL 21.

Those certain portions of Lots 11, 12 and 13, of Tract No. 8704, as per map recorded in Book 116, page 87 of Maps, records of said county, which presently, as of March , 1966, are being occupied by the existing Subway Tunnel, lying southerly of a straight line along the face of the existing North Portal of said tunnel, said straight line extending easterly and westerly from, and at right angles to, the center line of said tunnel.

Together with that portion of the northerly 25 feet (measured radially) of Emerald Street, 50 feet wide; and, also that portion

of Toluca Street, 60 feet wide, both as shown on the map of said Tract No. 8704, which would pass with a conveyance of the above-described parcel.

RESERVING unto the Grantor, its successors or assigns, the fee title of said portions of Lots 11, 12 and 13.

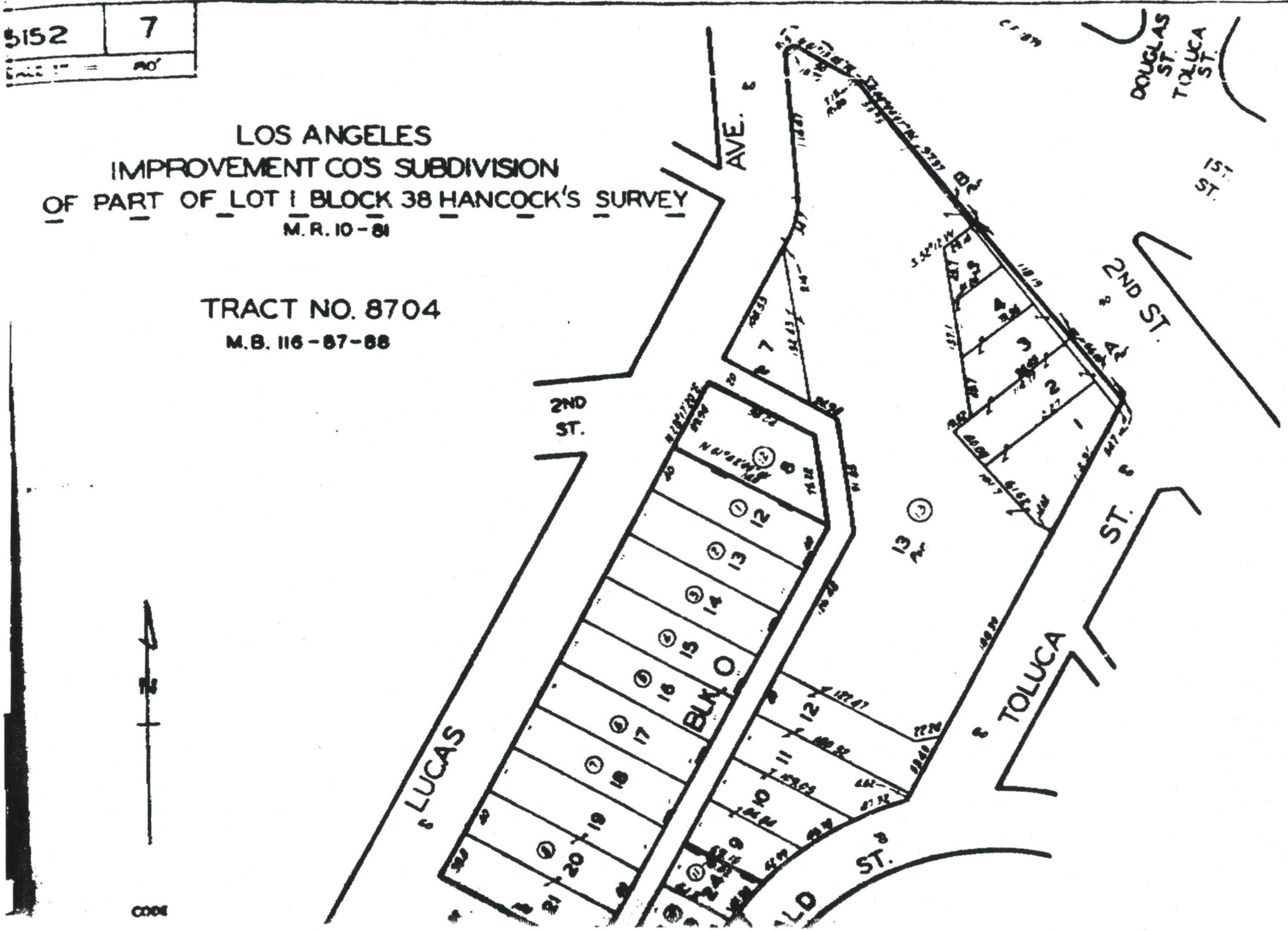
5152	7
1" =	200'

LOS ANGELES IMPROVEMENT CO'S SUBDIVISION OF PART OF LOT 1 BLOCK 38 HANCOCK'S SURVEY

M.R. 10-81

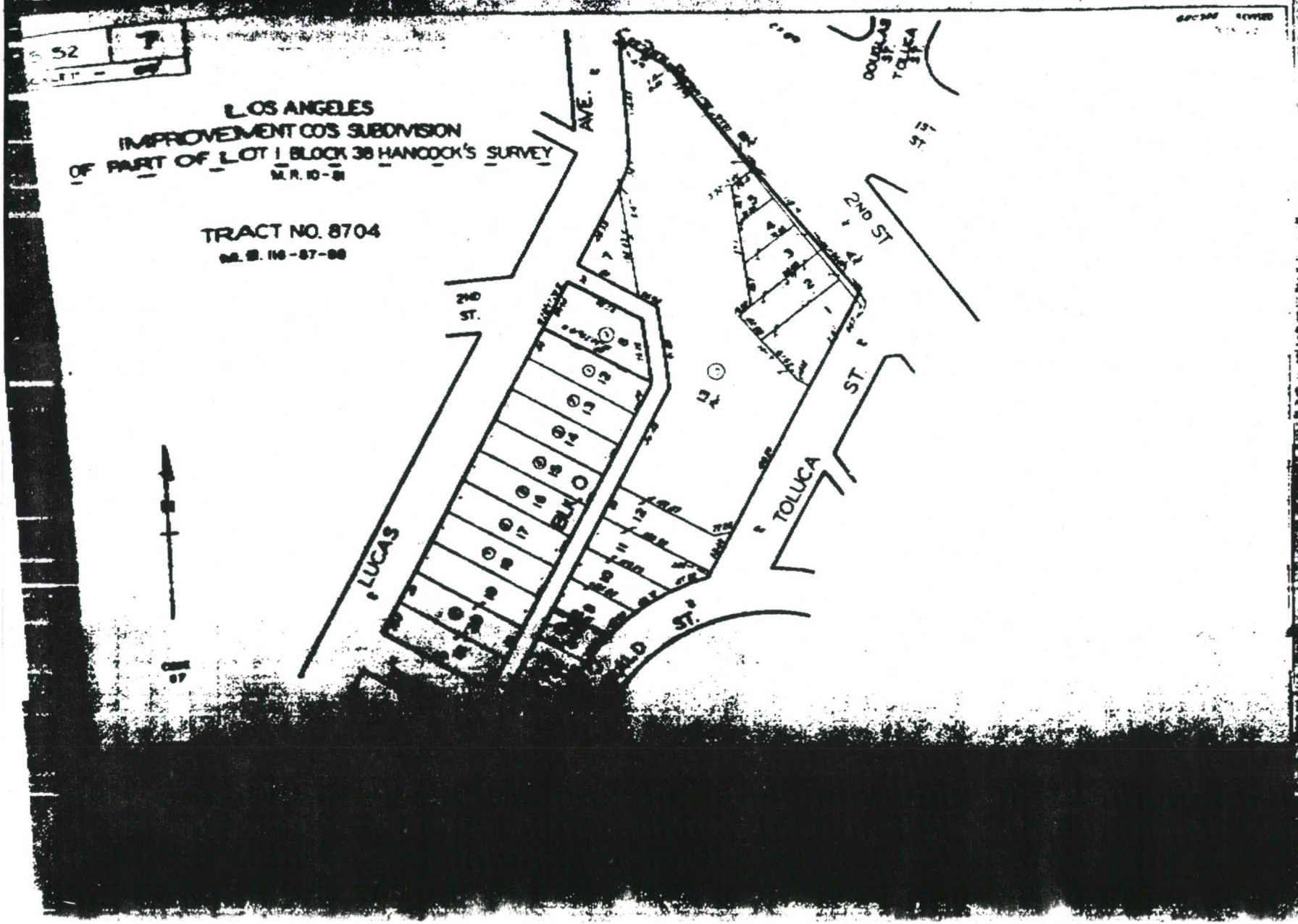
TRACT NO. 8704

M.B. 116-87-88



ASSESSORS PARCEL NUMBER / OWNERS NAME / MAILING ADDRESS / PROPERTY LOCATION / LEGAL DESCRIPTION	RGN TAX-AREA	OWNERS PHONE # / YEARS WITH SAME PHONE #	LAND USE/PROPERTY CLASS / LOT SIZE / ACRES / SQFT / STATISTICAL INFORMATION / IMPROVEMENT INFORMATION	VERIFIED SALES AMOUNT / DATE / MORTGAGE INFORMATION / ADDITIONAL BUILDING DATA	SALE AMOUNT / TYPE / DATE / DOC NUMBER	TOTAL VALUE-TV / LAND VALUE-LV / IMPRV VALUE-IV / TOTAL TAXES/YR
5152-007-009 THE LUCAS-EMERALD ACCOUNT 1201 HUNTLEY DR LOS ANGELES CA 90026 EMERALD ST LOS ANGELES CA *279 LOS ANGELES IMPROVEMENT COS SUB OF PART OF LOT 1 BLK 38 HANCOCKS SURVEY BLK-O LOT-22	08 67		0100-SINGLE FAMILY RESID ZONING-LAR4-2		$87,000 07-81 05-78	$79,618-TV $79,618-LV $814.77/88
5152-007-010 THE LUCAS-EMERALD ACCOUNT 1201 HUNTLEY DR LOS ANGELES CA 90026 EMERALD ST LOS ANGELES CA *275 LOS ANGELES IMPROVEMENT COS SUB OF PART OF LOT 1 BLK 38 H S BLK-O LOT-23	08 67		0200-DUPLEX ZONING-LAR4-2		$87,000 07-81 05-78	$51,224-TV $18,195-LV $33,029-IV $533.02/88
5152-007-011 THE LUCAS-EMERALD ACCOUNT 1201 HUNTLEY DR LOS ANGELES CA 90026 EMERALD ST LOS ANGELES CA 90026 *273 LOS ANGELES IMPROVEMENT COS SUB OF PART OF LOT 1 BLK 38 HANCOCKS SURVEY BLK-O LOT-24	08 67		0100-SINGLE FAMILY RESID ZONING-LAR4-2 41 X 70 STORY -1 **IMPROVEMENT INFORMATION** # DSGN C/SH UN BD/BH YR SQFT 1 0110 D45A 1 1/ 1 1 576	NT/AC-FLR/UL	$30,000 10-81 03-78	$88,714-TV $58,006-LV $30,708-IV $915.30/88
5152-007-012 EMERALD HILL ASSOC AND TOLUCA STATION ASSOCIATES TYE RUBINS 136 S PALM DR # 401 BEVERLY HILLS CA 90212 TRACT NO 8704 LOT-B	08 67		040V-VACANT-RESID 4-UNIT ZONING-LAR4-2*		$2,300,020 GRTD 12-86M 1820588 12-85M 1501225	$137,957-TV $137,957-LV $1,408.81/88 DELINQUENT YR-87
5152-007-013 EMERALD HILL ASSOC AND TOLUCA STATION ASSOC TYL RUBENS 9538 BRIGHTEN WY # 205 BEVERLY HILLS CA 90210 W 2ND ST LOS ANGELES CA 90000 *1304 TRACT NO 8704 LOT COR AT MOST W COR OF LOT 9 TH SE ON SW LINE OF SD LOT TO NW LINE OF EMERALD ST TH NE THERE- ON AND NE ON NW LINE OF TOLUCA ST AND NW ON NE LINE OF 2ND ST AND S AND LOT-13	08 67		2600-AUTO SVC SHOP ZONING-LAC2-2-R4-2* **IMPROVEMENT INFORMATION** # DSGN C/SH UN BD/BH YR SQFT 1 2600 CX 1248		$2,300,020 GRTD 12-86M 1820588 12-85M 1501225	$1,804,053-TV $1,804,053-LV $18,943.38/88 DELINQUENT YR-87
5152-008-009 STOLZBERG MICHAEL M CO TR STOLZBERG TRUST 1540 ARROYO VIEW DR PASADENA CA 91103 W 1ST ST LOS ANGELES CA *1252 LOS ANGELES IMPROVEMENT COS SUB OF PART OF LOT 1 BLK 38 H S EX OF ST LOTS 4 AND BLK-N LOT-5	08 67		1700-OFFICE BLDG ZONING-LAM1-2		06-87 $65,000 08-75	$75,763-TV $39,058-LV $36,705-IV $931.05/88

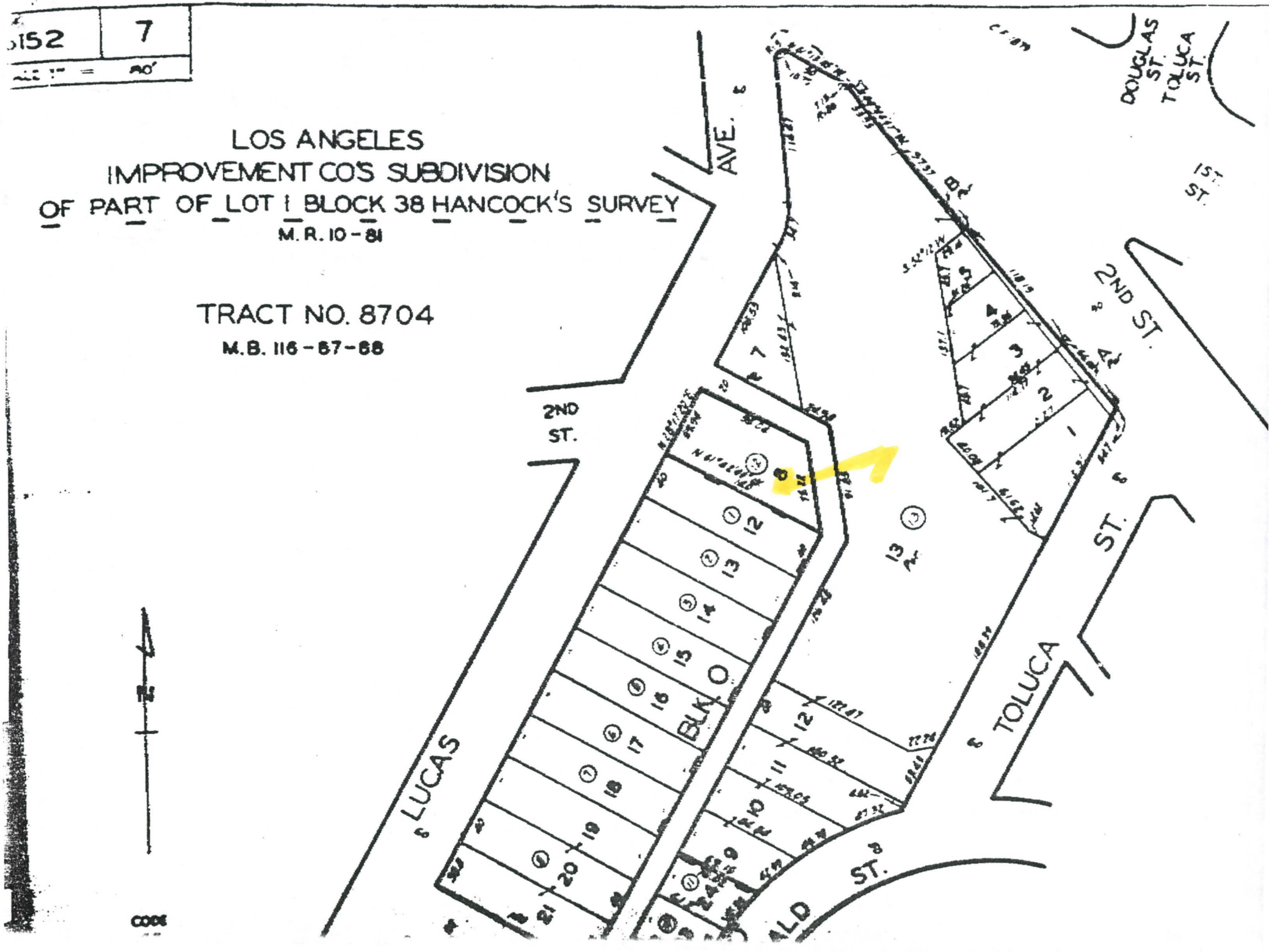
SUBDIVISION OF AIRSPACE
CONDOMINIUM TRACT NO. 36644



152	7
1" =	20'

LOS ANGELES
IMPROVEMENT CO'S SUBDIVISION
OF PART OF LOT 1 BLOCK 38 HANCOCK'S SURVEY
M. R. 10 - 81

TRACT NO. 8704
M.B. 116 - 67 - 68



ASSESSORS PARCEL NUMBER RGN TAX-AREA | OWNERS PHONE # | YEARS WITH SAME PHONE # | LAND USE/PROPERTY CLASS / LOT SIZE / ACRES / SQFT / STATISTICAL INFORMATION / IMPROVEMENT INFORMATION | VERIFIED SALES AMOUNT / DATE / MORTGAGE INFORMATION / ADDITIONAL BUILDING DATA | SALE AMOUNT / TYPE / DATE / DOC NUMBER | TOTAL VALUE-TV / LAND VALUE-LV / IMPRV VALUE-IV / TOTAL TAXES/YR

OWNERS NAME
MAILING ADDRESS
PROPERTY LOCATION
LEGAL DESCRIPTION

5152-007-009 08 67
THE LUCAS-EMERALD ACCOUNT
1201 HUNTLEY DR LOS ANGELES CA 90026
EMERALD ST LOS ANGELES CA
*279
LOS ANGELES IMPROVEMENT COS SUB OF PART OF LOT 1
BLK 38 HANCOCKS SURVEY
BLK-O LOT-22

0100-SINGLE FAMILY RESID
ZONING-LAR4-2

$87,000 07-81 05-78
$79,618-TV $79,618-LV $814.77/88

5152-007-010 08 67
THE LUCAS-EMERALD ACCOUNT
1201 HUNTLEY DR LOS ANGELES CA 90026
EMERALD ST LOS ANGELES CA
*275
LOS ANGELES IMPROVEMENT COS SUB OF PART OF LOT 1
BLK 38 H S
BLK-O LOT-23

0200-DUPLEX
ZONING-LAR4-2

$87,000 07-81 05-78
$51,224-TV $18,195-LV $33,029-IV $533.02/88

5152-007-011 08 67
THE LUCAS-EMERALD ACCOUNT
1201 HUNTLEY DR LOS ANGELES CA 90026
EMERALD ST LOS ANGELES CA 90026
*273
LOS ANGELES IMPROVEMENT COS SUB OF PART OF LOT 1
BLK 38 HANCOCKS SURVEY
BLK-O LOT-24

0100-SINGLE FAMILY RESID
ZONING-LAR4-2
41 X 70
STORY -1
IMPROVEMENT INFORMATION

#	DSGN	C/SH	UN	BD/BH	YR	SQFT
1	0110	D45A	1	1/ 1	1	576

HT/AC-FLR/WL

$30,000 10-87 03-78
$88,714-TV $58,006-LV $30,708-IV $915.30/88

5152-007-012 08 67
EMERALD HILL ASSOC AND
TOLUCA STATION ASSOCIATES
TYE RUBINS
136 S PALM DR # 407 BEVERLY HILLS CA 90212
TRACT NO 8704
LOT-8

040V-VACANT-RESID 4-UNIT
ZONING-LAR4-2*

$2,300,020 GRTD 12-86M 1820588
12-85M DELINQUENT YR-87 1501225
$137,957-TV $137,957-LV $1,408.81/88

5152-007-013 08 67
EMERALD HILL ASSOC AND TOLUCA STATION ASSOC
TYE RUBENS
9538 BRIGHTEN WY # 205 BEVERLY HILLS CA 90210
W 2ND ST LOS ANGELES CA 90000
*1304
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SE ON SW LINE OF SD LOT TO NW LINE OF EMERALD ST
TH NE THERE- ON AND NE ON NW LINE OF TOLUCA ST
AND NW ON NE LINE OF 2ND ST AND S AND
LOT-13

2600-AUTO SVC SHOP
ZONING-LAC2-2-R4-2*
IMPROVEMENT INFORMATION

#	DSGN	C/SH	UN	BD/BH	YR	SQFT
1	2600	CX				1248

$2,300,020 GRTD 12-86M 1820588
12-85M DELINQUENT YR-87 1501225
$1,804,053-TV $1,804,053-LV $18,943.38/88

5152-008-009 08 67
STOLZBERG MICHAEL M CO TR STOLZBERG TRUST
1540 ARROYO VIEW DR PASADENA CA 91103
W 1ST ST LOS ANGELES CA
*1252
LOS ANGELES IMPROVEMENT COS SUB OF PART OF LOT 1
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BLK-N LOT-5

1700-OFFICE BLDG
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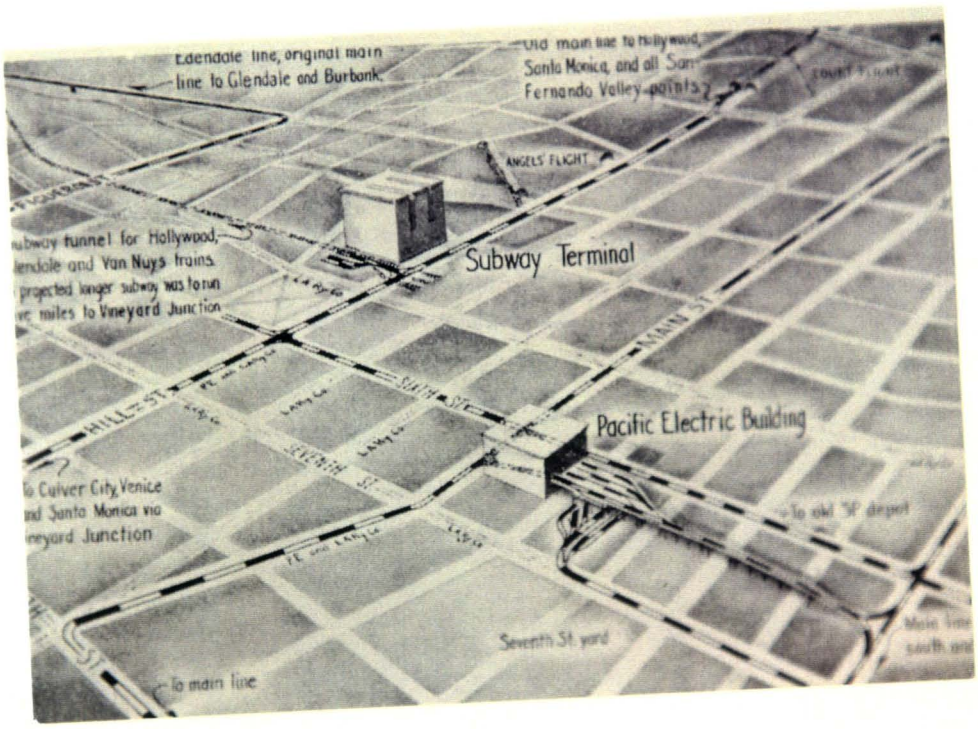
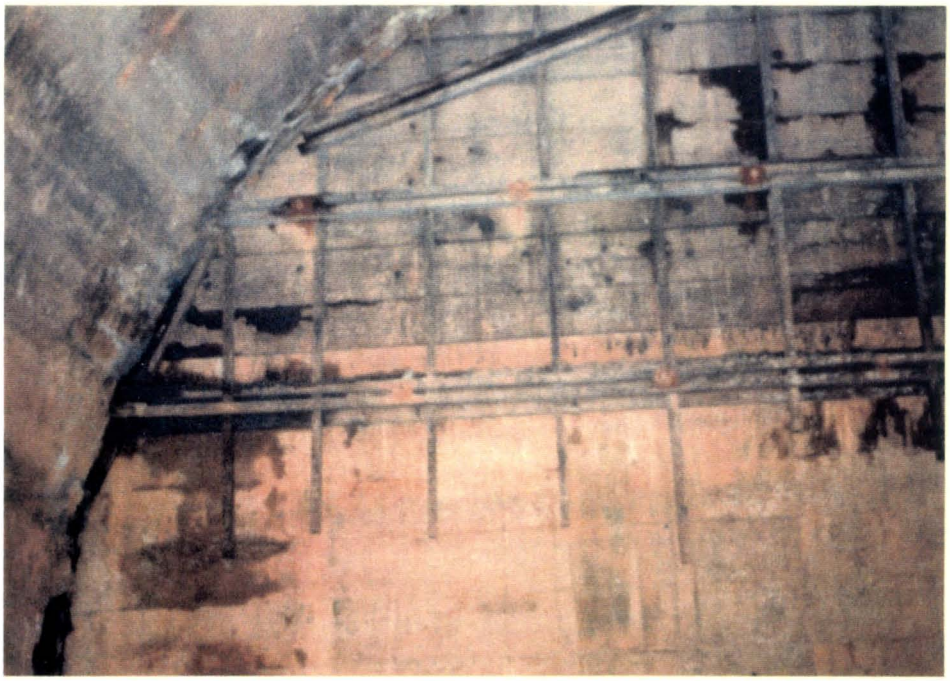
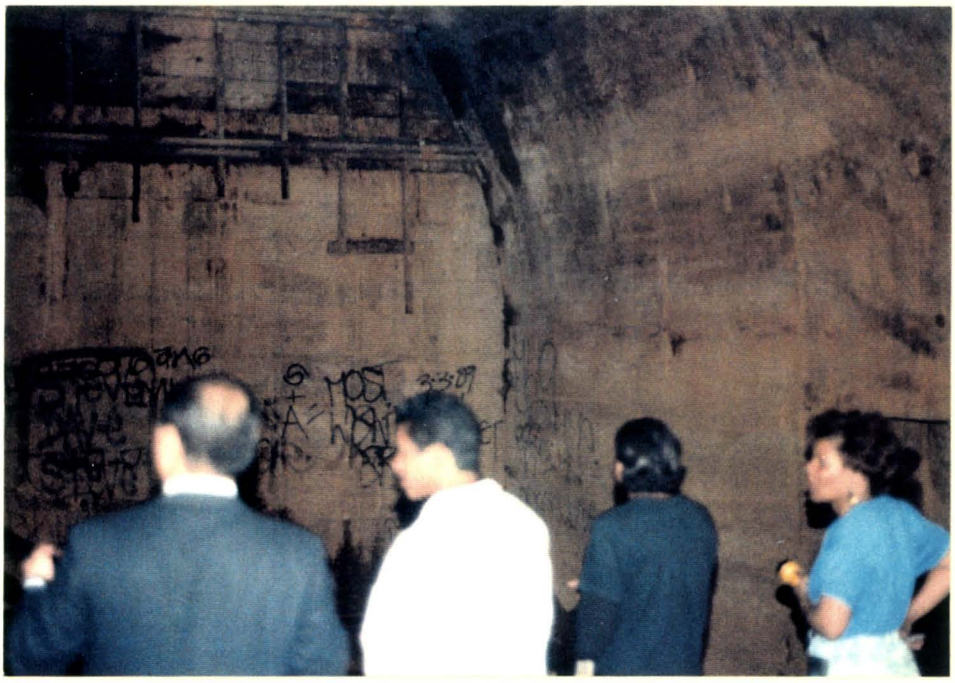
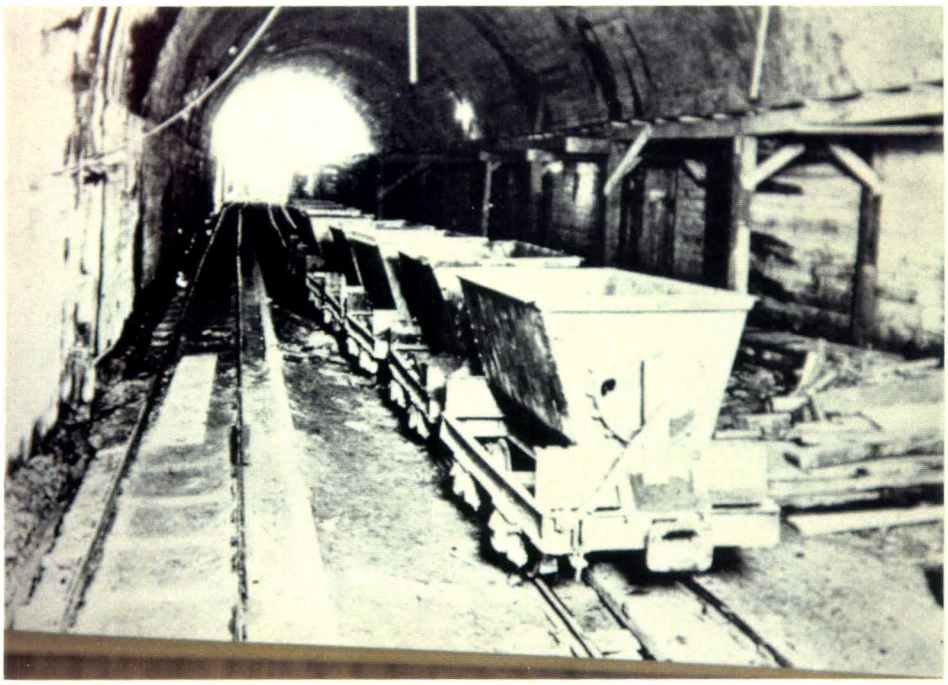
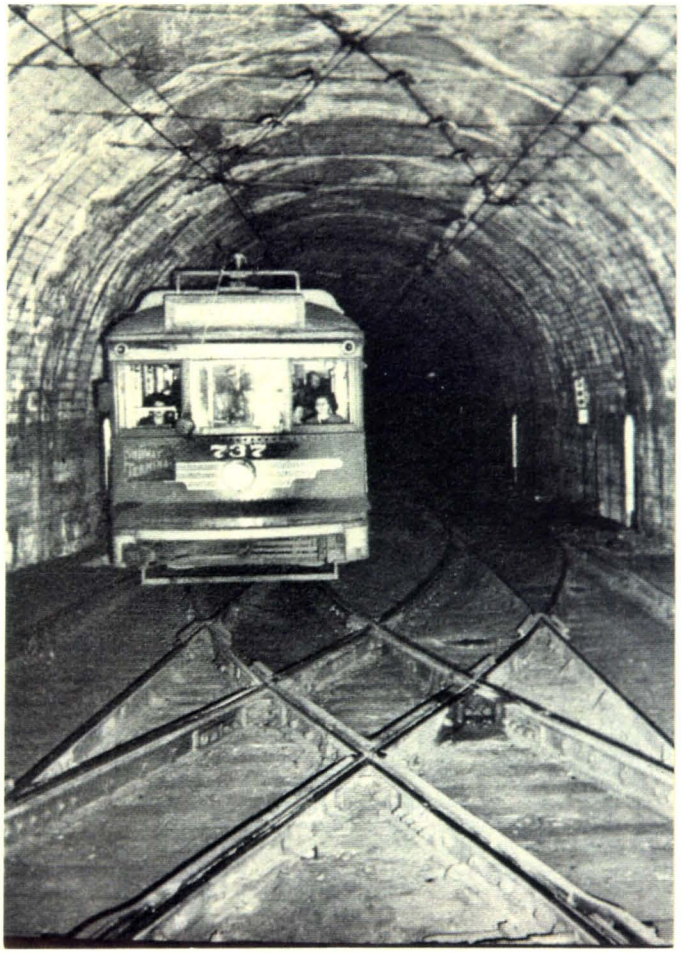
06-87 $65,000 08-75
$75,763-TV $39,058-LV $36,705-IV $931.05/88

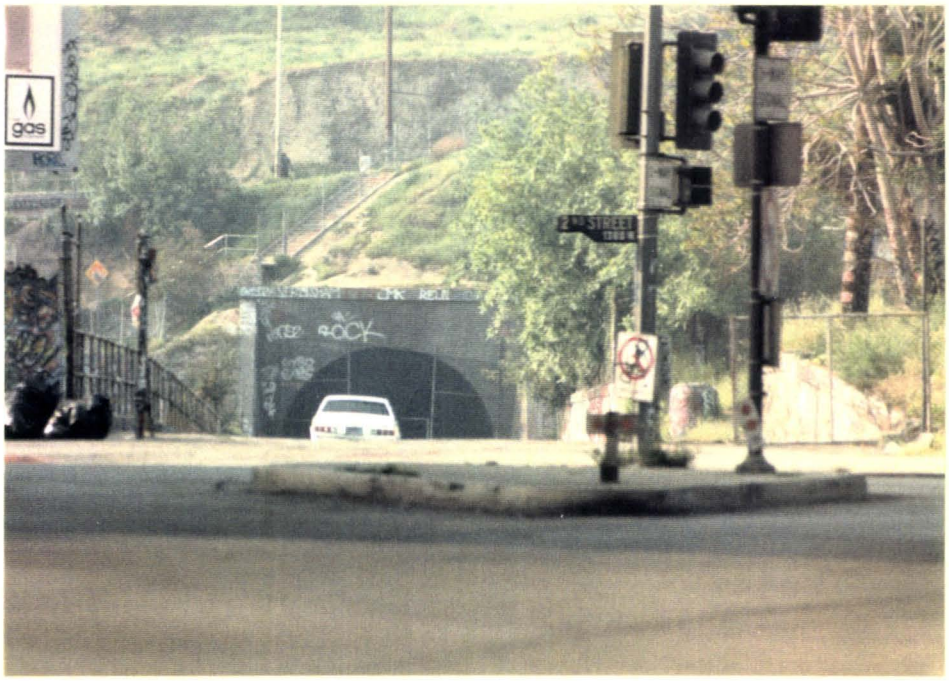

Glendale line, original main line to Glendale and Burbank
Old main line to Hollywood, Santa Monica, and all San Fernando Valley points
ANGELS FLIGHT
Subway Terminal
subway tunnel for Hollywood, Glendale and Van Nuys trains. projected longer subway was to run ve miles to Vineyard Junction
MAIN ST
SIXTH ST
HILL ST
SEVENTH ST
Pacific Electric Building
To Culver City, Venice and Santa Monica via Vineyard Junction
To old "SP" depot
Seventh St. yard
To main line







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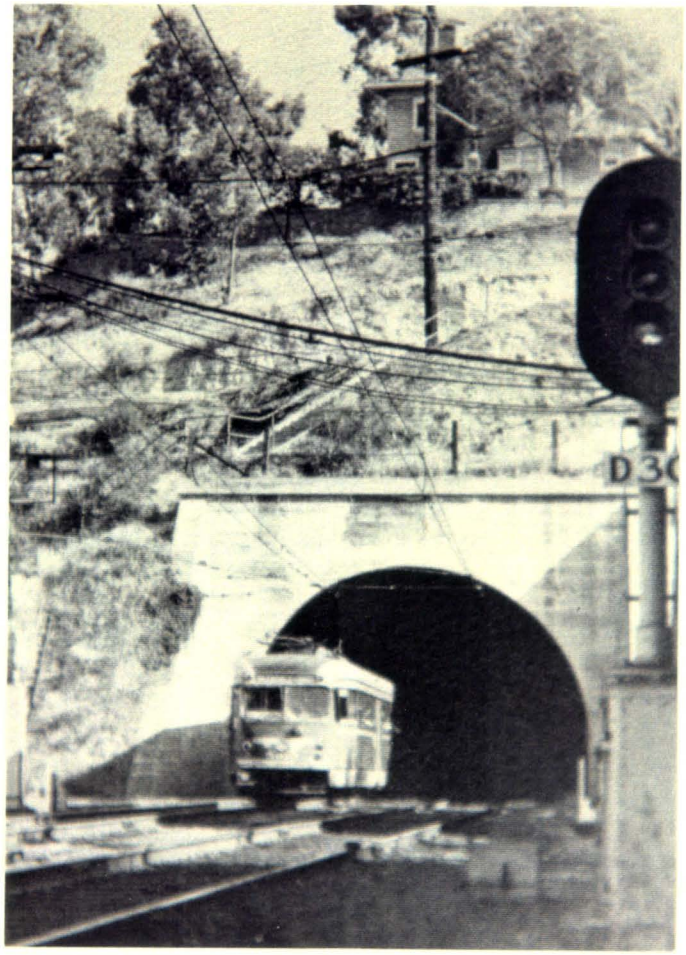


GLENDALE
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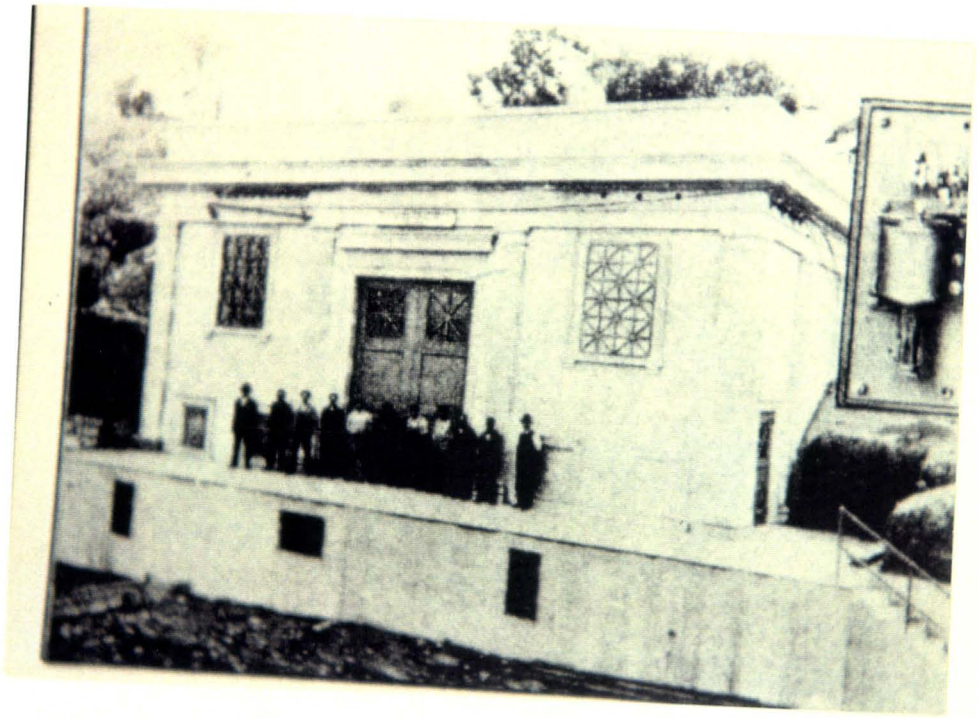

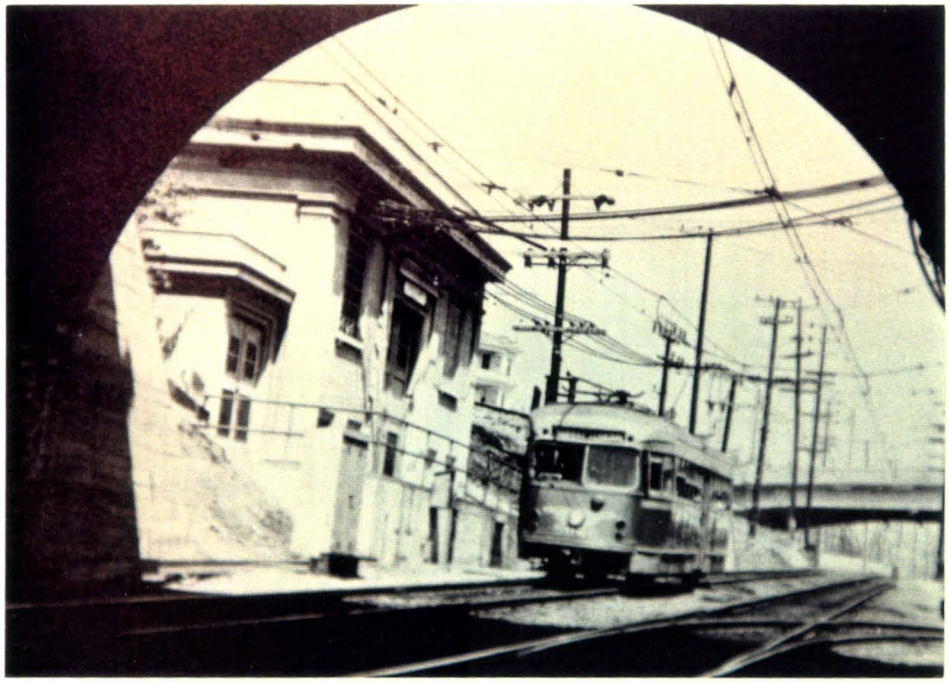

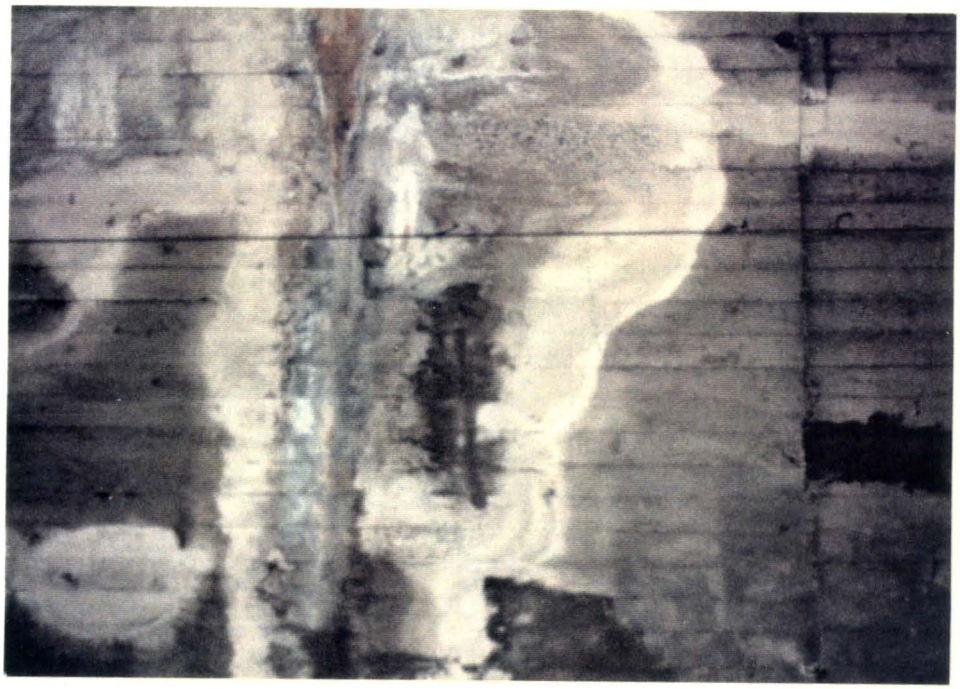

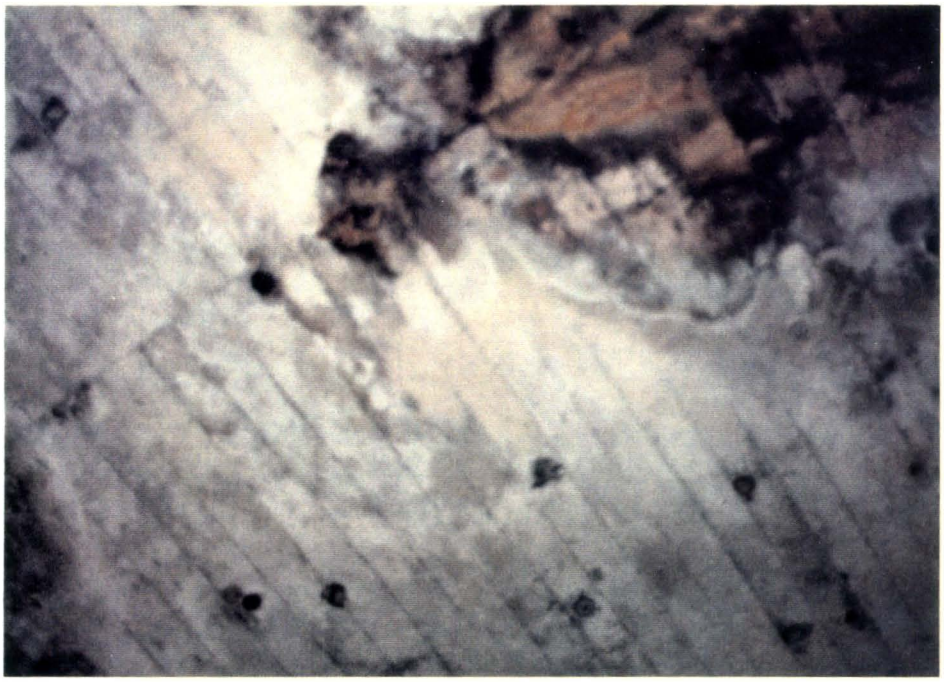


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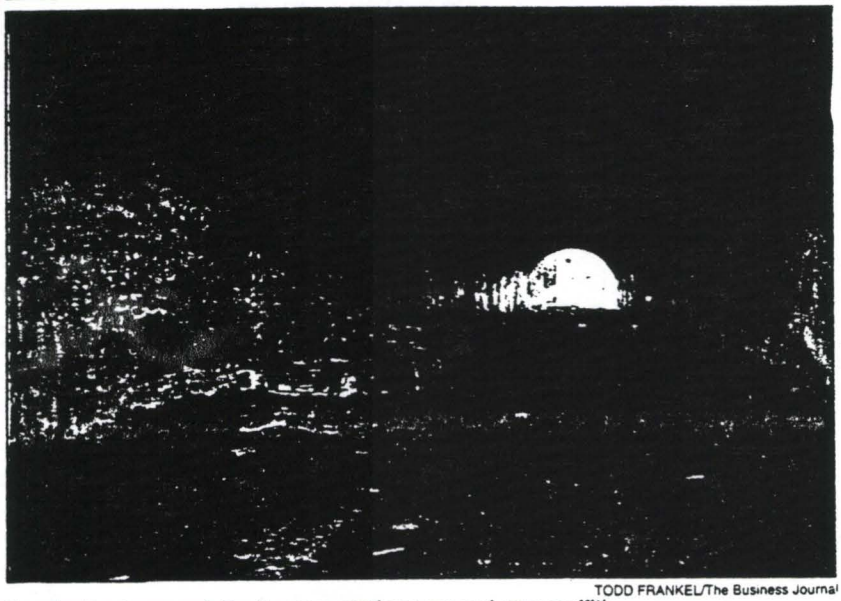


TODD FRANKEL/The Business Journal

No velvet underground: Rusting cars, methane gas and gang graffiti

Downtown's forgotten tunnel

Some assert Los Angeles should take a new look at its first subway (circa '25)

BY BENJAMIN MARK COLE
Senior Reporter

I am 60 feet below the streets of downtown Los Angeles, 2,500 feet from the nearest exit, and pond-side.

I am in Los Angeles'*first* subway, built in 1925 by Pacific Electric, but abandoned 30 years later in deference to the auto age. Having snuck through a two-foot hole in a chainlink fence at the tunnel's entrance, I am alone.

Armed only with a Eveready Energizer emergency roadside flashlight — a gift from an ex-girlfriend and loaded with years-old batteries — I curse my wingtip shoes, which serve poorly in the rocky gook underfoot. I ease my way down a slimy slope to the pond's edge, to satisfy an insistent amateur biologist's curiosity: Is there life in this pond?

The pool, which is the width of the city-owned tunnel — 28 feet — is about three feet deep and eight across, and at the tunnel's end, abutting the Westin Bonaventure hotel. Before the hotel was built in 1975, the foundation was sunk through the old tunnel, blocking it where I stand.

If I could walk through the blockade and then on about another 2,500 feet, I would

Please see Tunnel page 11

Tunnel: Where is the parakeet?

Continued from page 1

reach the Subway Terminal Building on Pershing Square, an office building built in 1928 over the subway's original terminus.

Back at pond's edge, the water looks crystal clear and is fed by two small streams. Despite the inflow, the pond's level appears stable.

A dimming flashlight perhaps reveals an answer to the pond's sterility. There, on a small earth embankment on the other side of the pond — and one-half mile from the tunnel's sole entrance — is an oozing automobile battery, draining into the pond. The battery could only have been carried here by hand.

I have come as far as I can, and I am eager to leave. Water is dripping from the semi-circular 22-foot-high ceiling, and it has just dawned on me that Los Angeles is a city of methane gas, and that oil wells still pump crude only blocks away.

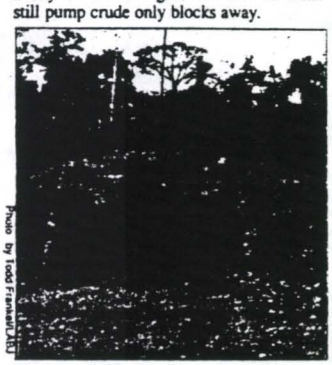


Photo by Todd Frantsen/LAHJ

Time tunnel: The Red Car runs no more

Tunnel literature had mentioned special fans used to vent dangerous gasses back in 1925, when three shifts of 215 men each worked on the subway's construction. I don't even have a parakeet.

Walking back towards the tunnel entrance, I see little reminder that this subway for 30 years carried Red Car trollies, full of Glendalians and other travelers heading downtown. It cut 15 minutes off the downtown commute in those days.

The Red Cars went underground at the same entrance I used, near the intersection of Glendale Boulevard and Second Street, before going the last mile underground to downtown.

The Red Car system, at one time the largest intra-urban transit system on the globe, was getting crowded by itself and the auto back in the mid-1920s, provoking the tunnel-building.

An article in the Dec. 10, 1925 issue of the Pacific Electric magazine said, "The subject of subways and elevated tracks as a means of rapid transit in the City of Los Angeles is by no means a new one in the minds of the officials of the Pacific Electric Railway, as the purchase of right of way some 10 years ago for subways to serve West Coast Beaches, and also the northwest territory of the City of Los Angeles, bears out."

The tunnel was built in 18 months, from first shovel-stroke to train whistle.

But today, nowhere are the old Red Cars, and even the tracks are gone. Light fixtures have been ripped out. The floor is wet dirt, stony in parts.

Why is the tunnel so unused, in a city — particularly a downtown — where every square foot seems valuable?

"Because nothing happens unless the politicians get money," charges Tye Rubins, who owns a 2.5-acre parcel at the tunnel's mouth. "This is a $60 million resource that's going to waste."

By Rubins' reckoning, the old PE tunnel today should conduit mini-buses into downtown, from an urban village in "Central City West," the area of razed blocks of land west of the Harbor Freeway from downtown.

He is willing to give the city one acre at the mouth of tunnel, if only it were reopened. He figures to profit on skyrocketing land values after the tunnel opens.

"The mini-buses could go into downtown," Rubins exclaims. "It's a win-win for everybody."

He says the PE tunnel could be made to open up at Fourth and Figueroa streets downtown.

Rubins believes the city Community Redevelopment Agency is against the reopening of the PE tunnel because it would promote development west of the Harbor Freeway — outside the CRA's tax zone, which encompasses downtown proper, east of the Harbor Freeway. (The CRA gets its money by collecting property taxes on new buildings built within its territory.)

"They (the CRA) have undermined development outside the CRA tax increment zone," says Rubins, 47, now semi-retired on the basis of profits made in real estate development.

As it turns out, various local officials are again scratching their heads as to how to use the PE tunnel, as they have been doing on and off since it was closed.

A 1975 study, by the city's street opening and widening division, talked about a people-mover in the tunnel, and today officials wonder if, in fact, Rubins' plan makes sense.

"It does cross the freeway and would connect Central City West to downtown," says James Okazaki, senior transportation engineer in the city's rail transit division. "Why not use it? I walked in the tunnel about a year ago to take a look at it."

The Los Angeles County Transportation Commission has also looked at the tunnel, but has not done much more than cursory studies. Last year the commission gave $10,000 to DKS Associates in downtown Los Angeles to mull the feasibility of reopening the tunnel.

At DKS, they say a re-opened tunnel makes sense.

"We feel there is a potential for re-use. It would be pretty inexpensive to re-open it, given that a new tunnel costs about $75 million a mile to build," says Maurice Mitchell, director of engineering at DKS. "It could run smaller buses or even full-size buses that go one way — downtown in the a.m. and reverse in the p.m."

But at the CRA, there appears to be skepticism that the tunnel can ever be made to work again. "We have no plans for the tunnel. The question is how you get reconnected back to the surface (from where the tunnel is blocked at the Bonaventure). Also, there are safety question, new earthquake standards," said Steve Andrews, transportation manager for the CRA.

As for me, back in the tunnel, I can now see the tunnel's entrance about 1,000 feet away. Closer to the entrance are two rusty hulks of cars and flotsam from modern-day homeless — old firesites, collected firewood, trash, bits of furniture, shards of clothing, broken bottles.

It is a crisp fall day outside the mouth of the tunnel, and I can see the purple San Gabriels against the azure sky. Kids are exuberantly spraypainting the old PE station at the tunnel entrance — spraypaint on top of spraypaint — and trash is everywhere. I turn my flashlight off and head back to the office, walking through where Red Cars used to clang on by.

LOS ANGELES
DOWNTOWN
NEWS

Tunnels to Nowhere

City Searches For Useful Ideas Before Federal Deadline Runs Out

A Look at Downtown's Two 'Orphan Tunnels,' and a New Effort at Finding a Use for Them

by Marc Porter Zasada

Downtown has not one, but two "tunnels to nowhere" which might be used to alleviate some of our traffic troubles.

If anyone can figure out exactly how.

The tunnels have taken on a certain legendary quality at meetings of civic leaders, who periodically attempt to plan them into the emerging transit system.

Legendary, because few seem to know exactly where they run, or why they exist.

Two years ago, the Community Redevelopment Agency spent almost a million dollars to "save" one of the tunnels, and the press raised a fuss. Now the CRA and the Department of Transportation are heading into a $140,000 joint study project to try and figure out what exactly to make of these two orphans, abandoned by the rapidly-changing face of transportation politics in Downtown Los Angeles.

The so-called "Bunker Hill Transit Tunnel" is only partly a real tunnel. One end, for example, is a tennis court. Part of it is a parking garage, and some of it is just "easements" through existing buildings.

It's often called the UMTA Tunnel because the Urban Mass Transit Agency of the federal government put up some $3 million to "build" the tunnel back when the federal government planned to help Los Angeles build a Downtown People Mover system in the late '70s.

The People Mover, modeled on the Disneyland system, was going to loop around the pedways of Bunker Hill, and connect up Union Station with the Convention Center.

When the Reagan Administration came in, it killed mass transit programs all across the country, and the People Mover money dried up or was given to Miami.

But that's another story.

In any case, UMTA wants its $3 million back, unless Los Angeles finds a use for the tunnel by one of two dates: the opening of Metro Rail (1992), or the opening of California Plaza Phase IIa (say 1991).

The Bunker Hill tunnel runs some 1500 ft, starting on the tennis courts of the World Trade Center, passing east through the air across Flower through Security Pacific Plaza, Hope Street, Lower Grand Ave, Wells Fargo Center, California Plaza, and across Olive to Hill Street—where it would emerge just north of Fourth street.

The answer to all ideas for using the tunnels is...maybe

If it really existed.

Fourth & Flower is one long block from the Metro Rail Station now being installed at 5th and Hill.

And there's the rub.

How about a moving sidewalk system through the Bunker Hill Tunnel to zip commuters from Hill to Figueroa?

Would it help to have all those parking garages hooked together?

How about little shuttle trains? Could the tunnel connect with an extended light rail system passing underground from 7th & Flower to Chinatown?

Could it somehow connect with the Metro Rail station a block away?

And could it somehow hook into the old Pacific Electric Tunnel (the other tunnel in this tale; see map) and move commuters to peripheral parking lots outside of Downtown?

The answer to all of these questions is.... maybe.

All such plans are intriguing, and while everyone in town has thrown out one or more of these ideas at transportation meetings, few have costs or ridership estimates to back them up.

Studies have been done before—both privately and publicly—but none have dealt with the most recent developments of Metro Rail and the LACTC's light rail plan.

Nevertheless, the present tunnel-planning initiative from DOT and the CRA (which will focus primarily on the Bunker Hill Transit Tunnel and get started within the next few weeks) has plenty of critics.

According to Judith Johnston-Weston, who is doing transportation planning for Downtown's powerful business lobby, the Central City Association: "The DOT plan is being called into serious question by many bodies, not just CCA. Caltrans, LACTC,

and City West have all said that it doesn't make sense at all to figure out the uses for a 1500 foot tunnel under Bunker Hill when you don't know what it will connect to.

"There is no Downtown mobility study, no Downtown mobility plan," she points out.

At a meeting of the CCA Transportation Committee, CCA president Chris Stewart said "We want to slow down the process of this RFP and make sure it connects to the other entities Downtown....Let's not just go off and do something, let's not make the mistakes of the past."

Stewart and others are worried that the City will go through with some unilateral plan to open the tunnel, possibly reshaping or precluding other Downtown transportation options.

At that same meeting, John Fisher, senior planner for DOT, defended the study, noting that "most transportation plans are implemented in increments."

If the future of the Bunker Hill tunnel is cloudy, the future of the old Pacific Electric tunnel is positively dim.

But don't tell that to Tye Rubins.

Rubins bought the property around the mouth of the tunnel in City West (see photo on front page). He owns all the frontage on Second and Toluca and Emerald—virtually an entire block.

The City owns the rights to the tunnel itself, and has a "floating easement" through Rubins' land out to Second Street.

The P.E. tunnel was built back in the '20s by the Pacific Electric train system, which ran a huge network of "red cars" throughout Southern California.

That system was dismantled in the '50s, thanks to the political clout which many credit to Goodyear Tires, General Motors, and the Automobile Association.

That, too, is another story.

In any case, this tunnel, which once ran from the corner of 2nd and Toluca to the Subway Terminal Building at Fifth & Olive remains. It was cut in the middle when the Bonaventure Hotel was built in 1975.

The hotel's support pillars went right through it.

"They knew it was there," says Rubins, "it was a criminal waste of a $50 million public asset."

More cuts were made as Bunker Hill was graded for further development, and it was feared that all the extra dirt would collapse the tunnel.

But the P.E. tunnel still runs straight from Second & Toluca, at the mouth of Glendale Blvd., to somewhere inside the Union Bank garage at Fourth & Figueroa— where the City has an easement to reopen it, if the City can figure out how or why to reopen it.

For the last few years, Rubins has been a one-man cheerleading section for "his" tunnel, with what he calls a simple and inexpensive plan to develop a new escape route and peripheral parking area for Downtown.

He has given his presentation to everyone from the Mayor to CRA officials. "No one ever said this was not a good idea," says Rubins. "The question was not if, but when."

Rubins says that if the City would allow him to build a massive peripheral parking lot, office and residential complex on his block of City West, he could open up the P.E. tunnel for around $4 million.

He would bring the tunnel up to the corner of Fourth and Figueroa (see drawing), and reroute DASH buses through it during commute hours — removing perhaps 4,000 cars from the central core's streets.

Commuters could walk the half block to the *other* unused tunnel, the Bunker Hill Transit Tunnel, where moving sidewalks would whisk them not only to the towers of Bunker Hill, but to within walking distance of the Metro Rail station. The moving sidewalks, he says, would run under $5 million to install.

Whether or not this is a "simple and obvious concept," it will probably never happen.

At one time, the CRA definitely did not want development to move to City West (the area just west of the Harbor Freeway, facing Downtown), and probably dismissed the Rubins plan for that reason.

That battle is over: City West is developing. But Rubins now has another formidable opponent named Gloria Molina. The Councilwoman has stated emphatically that she does not want City West to become the peripheral parking lot of Downtown.

So strong is her opposition, that plans have quietly been dropped by the CRA and CCA to develop *any* peripheral lot in her district.

And whatever the politics of opening another escape route out of Downtown, CRA and DOT planners seem unimpressed with Rubins' plan:

"The trouble is that the P.E. tunnel is a block away and 70 feet in elevation below the Bunker Hill Transit Tunnel," says Yukio Kawaratani, who will be overseeing the upcoming

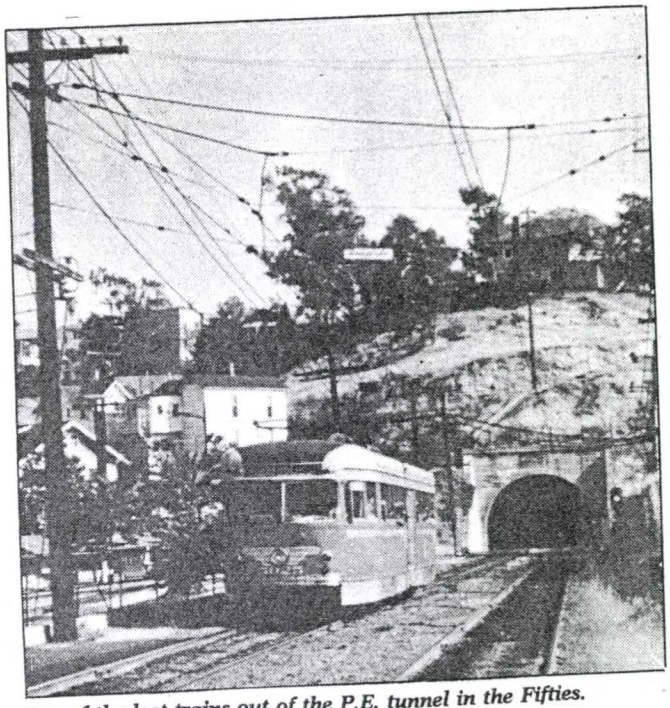
tunnel study on the CRA end. "Rubins would have to bring the P.E. tunnel up very steeply from below the Harbor Freeway to 4th and Figueroa. Too sharp for rail systems to climb, maybe too steep for buses to climb."

"What would be the traffic impact at Fourth and Figueroa, and what would be the traffic impact on Glendale Boulevard?" asks Kawaratani. "We just don't know."

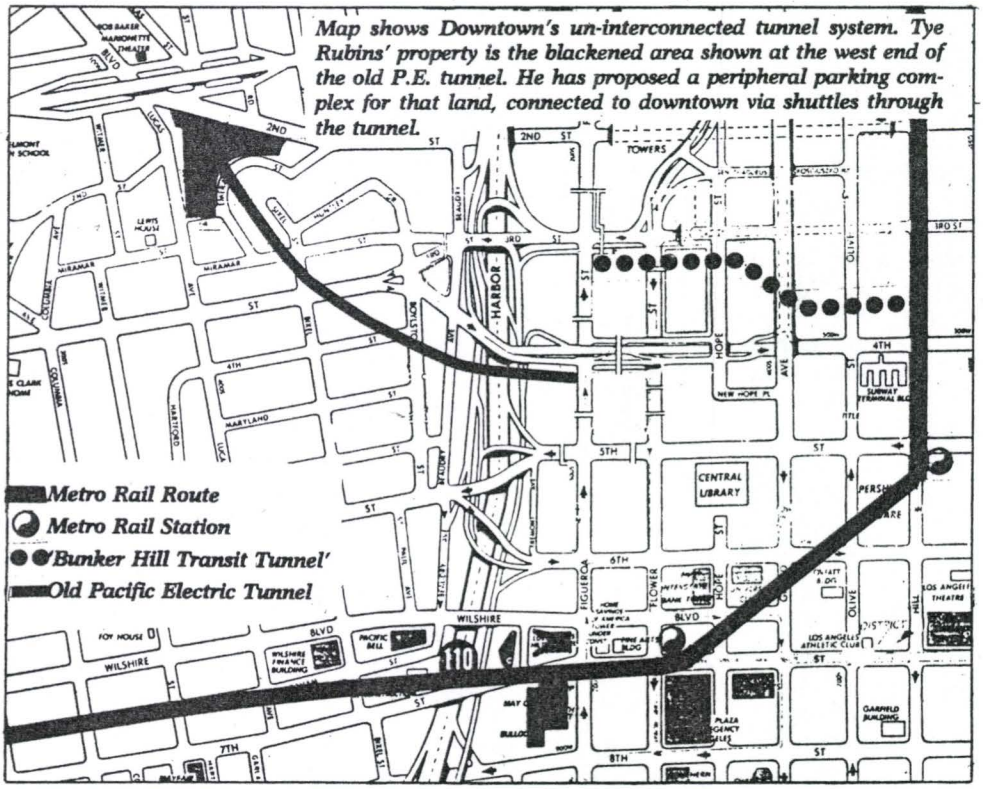
He raised the possibility of simply opening the tunnel into the Union Bank garage, and going from there. But like most City officials, Kawaratani is waiting to see the results of the consultants' study before venturing more definite opinions.

In the meantime, the P.E. tunnel and Rubins' property remains unused—except by gang members, who find the expanse of cement walls perfect for graffiti; and filmmakers, who find the tunnel and the graffiti a perfect background for gritty movies about the waste and confusion of urban life.

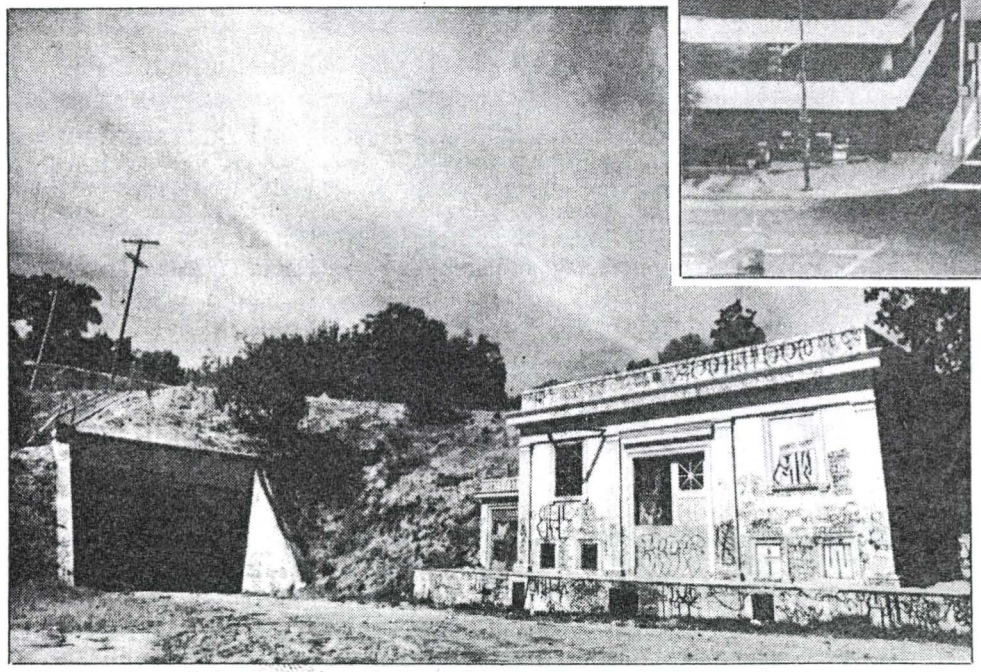
A half mile and a critical one-half block away, the Bunker Hill Transit Tunnel remains invisible to all but the Urban Mass Transit Agency and an emerging crowd of transportation planners.



One of the last trains out of the P.E. tunnel in the Fifties.

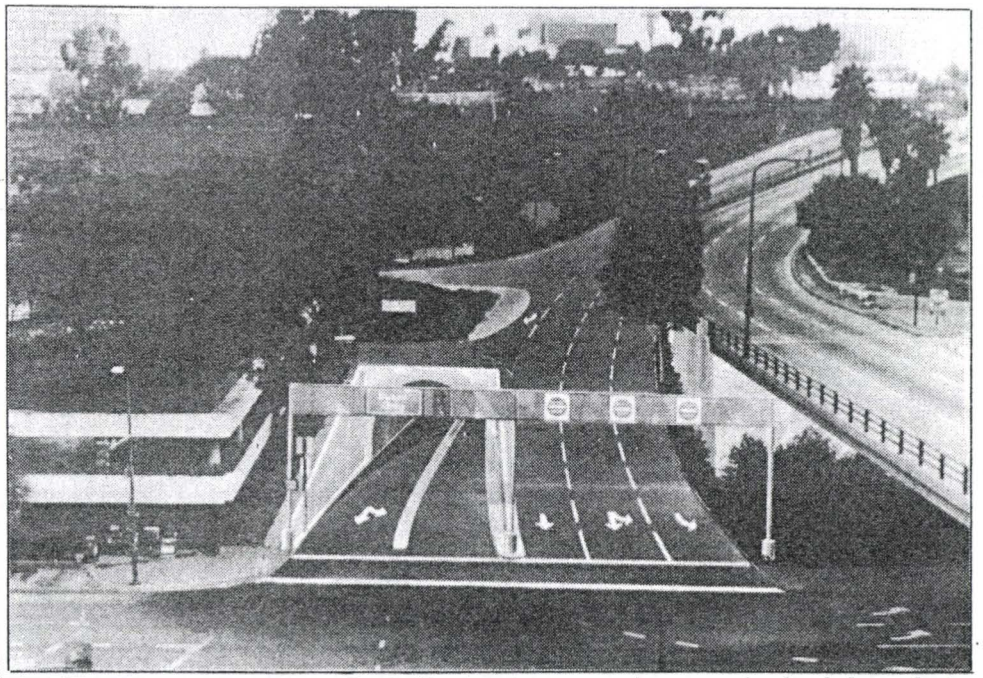


Map shows Downtown's un-interconnected tunnel system. Tye Rubins' property is the blackened area shown at the west end of the old P.E. tunnel. He has proposed a peripheral parking complex for that land, connected to downtown via shuttles through the tunnel.

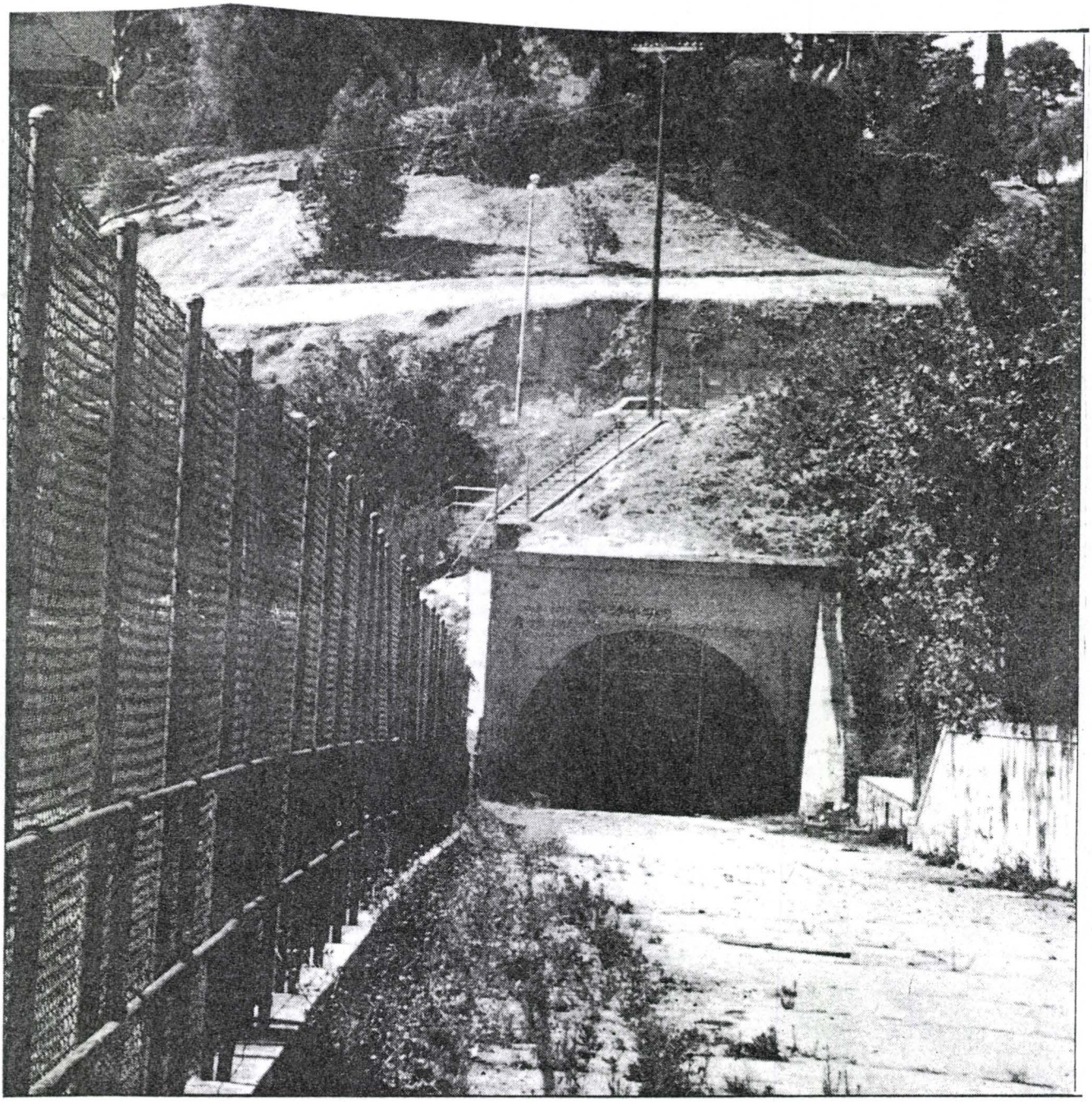


P.E. Tunnel mouth is now a haven for graffiti artists.

photo by Aldo Panzieri



Tye Rubins imagines a tunnel entrance for shuttle buses, letting out at 4th and Figueroa. Mouth of tunnel would be at center, left.



Mouth of the old Pacific Electric Tunnel, at Second & Toluca.

photo by Aldo Panzieri

LOS ANGELES DOWNTOWN NEWS

April 30, 1990

Monorail Proposal Becomes the Talk of the Town

Convergence of Needs From City West, Convention Center Brings Lightweight Transit Concept to the Top of the Agenda

by Marc Porter Zasada

It's just an idea. A working concept. No one has signed off on this, no one has even proposed it formally.

But everybody who's anybody Downtown is suddenly talking monorail—little Disneyland-like trains on elevated guideways to link up the Convention Center with distant Downtown hotels, planned City West developments, and Bunker Hill.

General managers of major hotels held a meeting Friday to talk about it. Alternate maps are being drawn up by paid consultants. Transportation officials are schmoozing with redevelopment officials. Monorail companies are mailing in brochures and promotional videos. And deep in the anonymous hallways of the RTD, planners are already fussing over the details.

Anyone who will talk about this idea, which has not yet been made public by any agency, begins by warning us not to call it a "people-mover." The people-mover, they point out, was an ill-fated concept based on an obsolete technology. Nobody wants to revive the people-mover plan of the late seventies, which was a heavy, linear-induction monster that was supposed to trundle along the pedways of Flower and Figueroa. The idea was killed by the Reagan Administration.

Now they use the term "ATS," as in Automated Transportation System, and if they're really bold, they come out and say the word monorail. It wouldn't *have* to be a monorail, they say. There are other forms of elegant and lightweight transport you can now buy off the shelf. But one can't help imagining those cute little trains whipping among the highrises, over the freeway, and up to office buildings and apartments in City West.

Suddenly it's in everyone's interest to talk about a monorail, say our sources, because of the confluence of four important issues Downtown.

—The City West plan, which includes 25 million square feet of new office space, seems headed for approval, but linking City West to CBD transit remains a problem. Chances for a $100 million Metro Rail Station at Bixel or Witmer are remote, given objections by RTD. With that same $100 million, say planners, you could build *four miles* of monorail to link City West into Downtown proper.

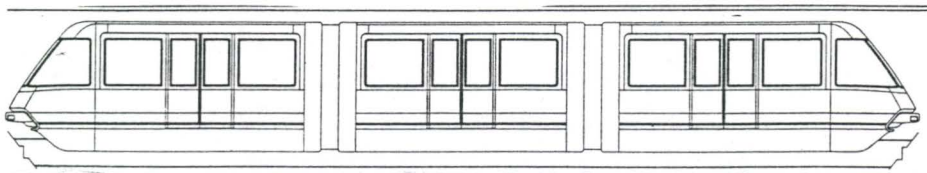
That money, or at least 75% of it, should be available, up front, as City West plans get approved.

—The City must come up with a use for the Bunker Hill Transit Tunnel, which runs from the World Trade Center to Hill Street beneath the shiny towers. If a use isn't found, the Federal Government is going to want back $3.8 million it sent to build the tunnel. The tunnel is narrow, but a monorail would fit through it.

—The Convention Center is expanding, but conventioneers don't like how far the Center is from both new and established hotels in the CBD. Shuttle buses are often perceived as unchic and unreliable.

—The Red and Blue rail lines, fully operational in 1993, still serve only limited areas of Downtown, as people are willing to walk a maximum of some 2500 feet from their workplaces to public transport. "Feeder links" of the lightweight ATS kind could be key to the transit system's success and significantly reduce bus traffic Downtown. A monorail could also make peripheral parking a workable part of transit development.

None of this, incidentally, has anything to do with the "Monorail Initiative" which a citizens group is trying to qualify



The "UM III Monorail" has been proposed by TGI in Florida. Cars like this will soon be running in Tampa and at John Wayne Airport in Orange County. TGI is only one company interested in a Downtown monorail project.

for the ballot. Public officials we have spoken with consider the initiative an ill-conceived and dangerous plan being pushed "by a fringe group."

Proposed Route

The first phase monorail route under discussion at the RTD is driven by the potential need (and money) in City West, but it tries to deal with all four of these pressing issues. It could also serve as the spine of a much more extensive system, built later on.

One consultant, Dave Webb, at Delon Hampton & Associates, who is supposed to be studying uses for the Bunker Hill Transit Tunnel, even has a map showing a 16-mile monorail system. If it were built (at a cost, he says, of only $350 million), no one working Downtown would ever be more than three diagonal blocks from mass transit.

His plan includes monorail lines running south to USC and Exposition Park and north up to Dodger Stadium. The latter sites could provide the long-discussed peripheral parking lots for Downtown.

Monorail lines can be constructed for about $15 million to $20 million a mile, compared to light rail at $60 million to $80 million a mile, and subway systems at some $250 million a mile.

But let's confine ourselves to the first phase, which could be constructed for as little as $100 million, says the RTD, and could easily be built in time for the Red Line opening in 1993.

We're talking about concrete posts, about three feet thick. At the top, they make a Y shape, and hold two curving steel guideways, each about 32 inches wide. Posts could be as far as 70 feet apart. The trains would look like the Disneyland monorail, but be about half the size and weight—more like the monorail at Magic Mountain. They would run very frequently in each direction and make lots of stops. This is not a "loop" but a bidirectional system.

Orange County has just signed up to install one of these at John Wayne Airport.

First Phase

The RTD map circulating quietly among civic leaders has an alignment roughly like this:

You start at the planned Convention Center Hotel, near the Blue Line Station, and the monorail runs right into the Convention Center itself. From there, it turns north, roughly along Francisco and into the proposed Metropolis development. From there, it's on to Citicorp Plaza, where it slips just between the 777 Tower and the planned Phase III tower. This would be a major station, as passengers could transfer to the nearby 7th and Figueroa Metro Rail Station, to the Hilton Hotel, and to the expected Macklowe and Mitsui Hotels.

Planners don't want to put the monorail right on Figueroa, as the street is crowded enough.

Now the monorail glides west over the freeway along the south side of Seventh Street, crosses to the north side around the WTC building and arrives at the Bixel Street Transit Mall (see related story). Here passengers can switch to the RTD buses running out Glendale Boulevard or along the Harbor Transitway.

The monorail glides right along the eastern edge of Bixel, with direct connections into planned developments by Hillman and others (who are said to be excited about the idea). Now it's up to Crown Hill, where more developers could incorporate monorail stations into their office and residential towers.

In later phases, Crown Hill monorail branches could head west and north into other residential areas, or even up toward Dodger Stadium.

But the main branch would cut sharply east along Third Street, cross over the freeway along the Third Street bridge, run across the tennis courts atop the World Trade Center, fly over Flower street and dive into the depths of Security Pacific Plaza, where the "Bunker Hill Transit Tunnel" begins.

From there it would run under Bunker Hill, with underground stops for Wells Fargo Center and California Plaza. It would then emerge 70 feet in the air above Hill Street and descend to the corner of Fourth and Hill, where passengers could transfer to a Metro Rail portal, a planned parking

structure at that corner, or stop in at the Grand Central Market for a pound of carrots.

Now the rail would continue just to the south of Grand Central Market, over Broadway, over the new Biddy Mason Park, past the new Broadway-Spring Center, over Spring, between the Banco Popular and State Office Buildings, over Main Street, and then terminate in a parking lot and "transfer center" between Main, Los Angeles, Third & Fourth Streets.

That's phase I, which could easily be built in two or three years for $100 million, say planners. After that, you could talk about extensions to Union Station and Chinatown or Little Tokyo or City Hall.

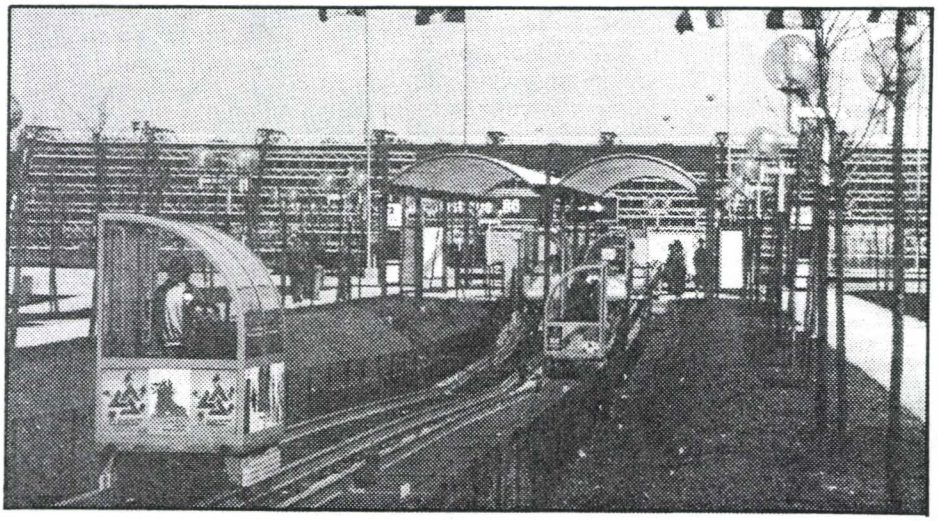
There has been some talk about using the old Pacific Electric Tunnel which runs from Union Bank to the corner of Second and Glendale, but planners say the PE Tunnel is too narrow and not well placed for the monorail.

Don't Jump the Gun

"We have to be very cautious about this," says James Okazaki, a senior transportation engineer at LADOT who is studying the Bunker Hill transit tunnel. "Right now, we're just looking at the tunnel. I don't think that we are ready to conclude officially that there is a monorail use for it. We don't want to jump the gun and say that a monorail is the way to go...though I am excited that we found a technology that would fit into the tunnel."

The Bunker Hill Transit Tunnel is only 17 feet, 3 inches wide and 14 feet high, making many systems impractical.

"Aerial may be the only way to go in the long run," continued Okazaki. "Tunnelling is so expensive. This would be lightweight, airy, like a big street light. It sounds good, but we need to see the scaling, and we need to get feedback from our core review group. They need to tell us if we're on the right track before we go public with this idea."

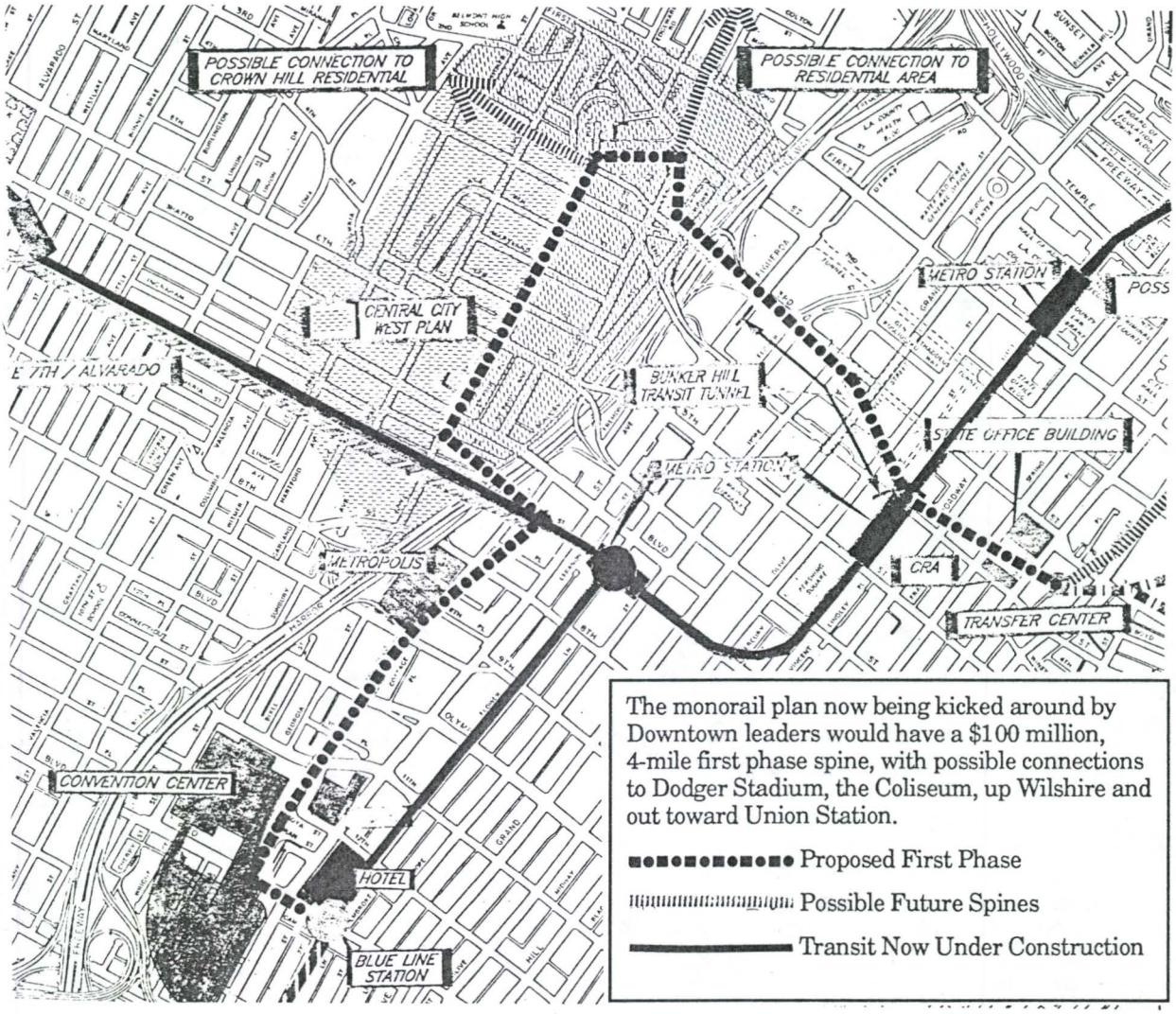


Monorail is not the only possibility. This is the cable-driven "SK" system now operating at the Villepinte Exhibition Park in France.

Okazaki, like others, is worried that Downtown building owners won't want the rail messing up the aesthetics of their architecture. Aerial systems have generated big opposition in residential areas, for example. But planners have been careful not to come closer than 20 feet to an existing building, and they point out that new technologies are much lighter and more pleasing to look at than, say, the system now operating in Seattle. "We went through all the areas of least resistence," says one planner working on the alignment.

The "core review group" of civic leaders meets on May 25th to review the monorail proposal before it goes public. Meanwhile, consultants are going ahead with attempts to come up with ridership figures for a monorail system, and some hoteliers are already privately enthusiastic about the idea. The Los Angeles County Transportation Commission has not yet become involved in the discussion.

According to David Grannis, who heads Center City West Associates, developers on his side of the freeway are looking at the monorail concept with great interest, even though they still support the idea of a subway stop at Witmer or Bixel. "The RTD didn't just criticize the idea of the station, they were pro-active, they came up with an alternative. We want to look at projections on volumes that could be carried. But I think it's a good idea, either way, additional Metro Rail station or not, the ATS should be very seriously considered."



The monorail plan now being kicked around by Downtown leaders would have a $100 million, 4-mile first phase spine, with possible connections to Dodger Stadium, the Coliseum, up Wilshire and out toward Union Station.

■●■●■●■●■●■● Proposed First Phase

Possible Future Spines

Transit Now Under Construction

INTEROFFICE MEMORANDUM

LACTC

LOS ANGELES COUNTY TRANSPORTATION COMMISSION 403 West 8th St., Suite 500, Los Angeles, CA 90014 (213) 626-0370

May 24, 1988

MEMO TO: RICHARD STANGER

FROM: JIM SIMS

SUBJECT: CCA/LADOT MEETING RE: PEOPLE MOVER TUNNEL

The meeting was obstensibly called to hear a presentation by LADOT on their $150,000 study to find a use for the existing committed portion of the People Mover Tunnel. The real reason for the meeting was to have CCA shoot down the city's study, and to launch a more comprehensive study of downtown circulation.

The group, which included representatives from CCA, CCWA, CRA, LADOT, and Caltrans, reached a consensus that the missing ingredient is a conceptual framework for resolving downtown circulation issues and that a detailed engineering study of potential uses for the People Mover Tunnel is premature.

I volunteered that our Commission would be doing a study related to "regional access"; i.e., how will all the major capital improvements we are pursuing fit together in the downtown area. It was clear that what is needed is a consensus on a conceptual approach rather than a detailed SCAG-type analysis of population growth, VMTs, etc., etc.

I stated that our intent was to do such a plan and that we would have a proposed study outline ready for Commission review in about a month. I also stated that we would be pleased to review the study outline prior to approval with the agencies represented at the meeting, and would solicit their participation as the effort progressed. It was also agreed that the City of Los Angeles

should perform a complimentary downtown circulation study addressing the details of downtown traffic circulation. The CCA people agreed that they would work directly with the City Council to redirect DOT's study in that direction.

I suggest that in doing our work, we should try to keep it conceptual and not be overly concerned with technical details. And, while we should invite the participation of all involved parties and seek consensus where possible, we should press on with the study and not get bogged down by too many external considerations.

As I've stated before, our division staff will be available to help with all phases of the study as needed.

JS:esk

cc: Sharon Neely
Pat McLaughlin
Ginger Gherardi
Fred Silverman
Paul Taylor
Susan Brown

September 25, 1989

TYE RUBINS
General Partner

L.A. PRODUCERS' PARTNERSHIP, LTD.
9538 Brighton Way, Suite 205, Beverly Hills, Calif. 90210
Telephone (213) 274-1220

MEMO TO: FILE

FROM: VIC KAMHI

SUBJECT: PE TUNNEL

I attended a meeting on September 13, 1989, with Jim Sims, Tye Rubins, and Oscar Rothenberg. The subject of the meeting was the possible development of the PE tunnel from Third, Bixel, and Glendale to Figueroa and Fourth Streets. Tye is interested in developing the tunnel for transit from his property to the CBD.

The specifics of his proposal are as follows:

1. LACTC acquires the rights to the tunnel from the City of Los Angeles.
2. LACTC sells the tunnel to the developer (Tye) for $1.00.
3. The developer improves the tunnel as a transit facility, using LACTC standards and specifications.
4. The developer leases the tunnel to the LACTC to recover improvement costs. (Estimated at $8 million plus interest).
5. At the end of the lease period, the tunnel reverts to LACTC ownership.

$10

Some of the issues which may cause problems include getting a clear title, there may have to be some condemnation of the tunnel for "transit rights", Caltrans and city permits to tunnel and make improvements (especially under the freeway), and addressing the design and access around the Figueroa end.

The developer will provide access and facility improvements around the portal to Second Street (ground to 30 feet). He plans to build a neighborhood shopping center in the area, possible including both a supermarket and day care center.

The tunnel, as proposed, would be served by electric buses (reducing ventilation requirements), hopefully as a third route of the DASH system.

Unresolved issues include the opposition by Councilwoman Molena, who opposes (1) remote parking for the CBD in CCW, and (2) wants residential, not commercial (office) development in the area. Tye will meet with her to attempt to develop a plan acceptable to her. He will also meet with Mike Lewis to discuss the plan. If he gets positive reactions from both, he will make a presentation to the LACTC Transit Committee on October 16 (1 pm) and LACTC on October 24.

tunnel/vk

ITEM 8

NEIL PETERSON
EXECUTIVE DIRECTOR

Los Angeles County
Transportation
Commission
403 West Eighth Street
Suite 500
Los Angeles
California 90014-3096
(213) 626-0370

September 27, 1989

MEMO TO: TRANSIT COMMITTEE - 10/17 MEETING

FROM: NEIL PETERSON

SUBJECT: NEGOTIATIONS REGARDING THE PACIFIC ELECTRIC TUNNEL UNDER THE HARBOR FREEWAY

ISSUE

The "Los Angeles Mini Metro Association" is requesting LACTC participation in an effort to re-open the Pacific Electric Tunnel from Beverly and Glendale Boulevards to 4th and Figueroa Streets for use by electric buses. Although construction and financing would be done by the Association, LACTC involvement is needed to facilitate the involvement of the public agencies, and to fund the project through a lease-purchase agreement with the Association.

RECOMMENDATION

Authorize staff to enter into negotiations with the City of Los Angeles, the Mini Metro Association, and other involved public agencies.

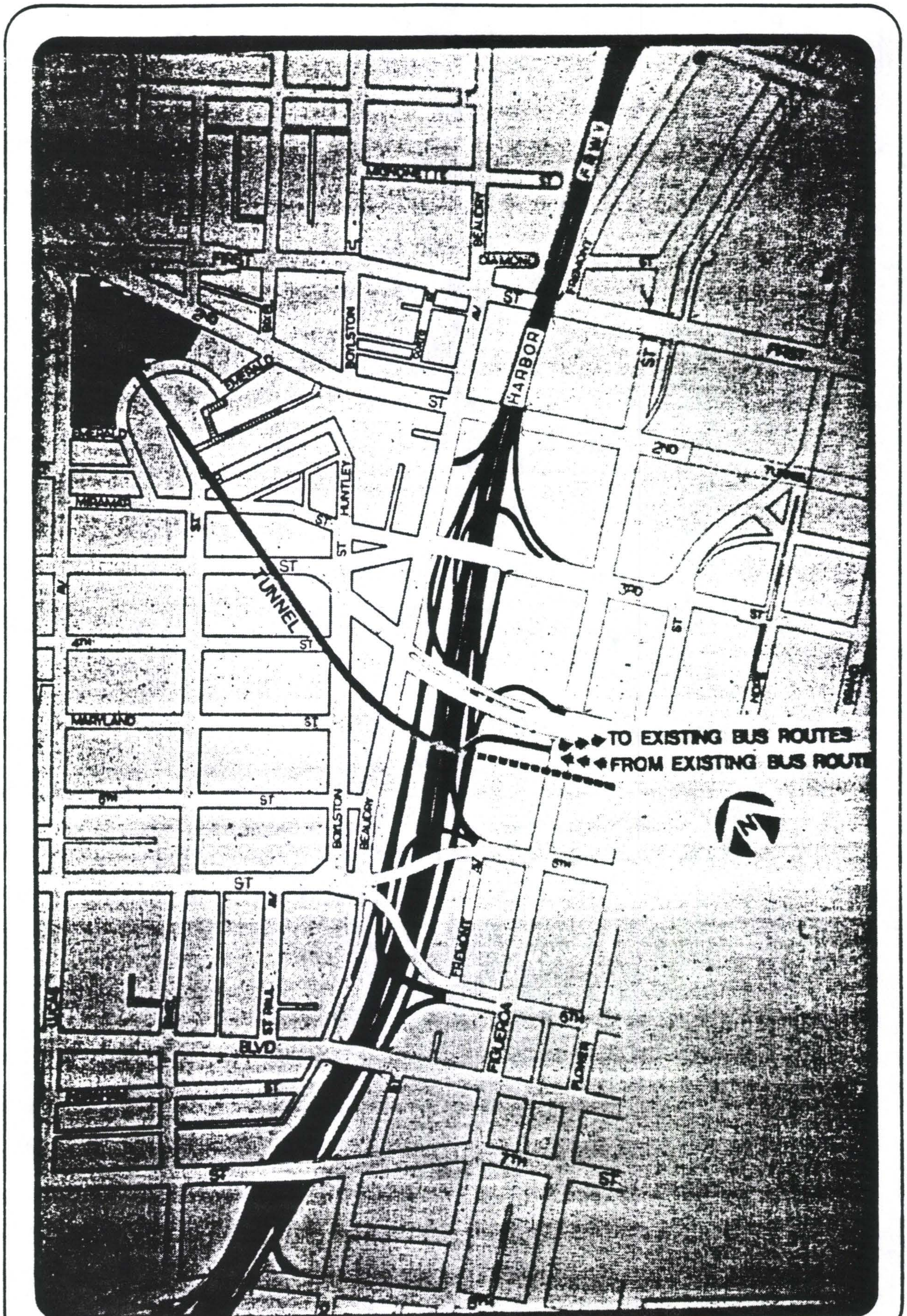
BACKGROUND

The Los Angeles Mini Metro Association, consisting of interested property owners, is working to re-open the Pacific Electric Tunnel. The tunnel was constructed in 1925 for the Pacific Electric streetcars. The Association is offering to provide access and improvements (including some property and air-space rights), which, when combined with the tunnel and the City of Los Angeles Maintenance yard at Second and Toluca Streets, will create a transit terminal and transfer facility, access to the west end of the tunnel, and construction of a new eastern access. The Association is willing to construct and finance the improvements, at an estimated cost of $8-10 million, in addition to the property and air space rights they are offering to dedicate to the LACTC.

The role of the LACTC would be to obtain title to the tunnel, ensure that transit services are provided through the tunnel into the downtown area, and enter into a lease-purchase arrangement for construction.

NEIL PETERSON
Executive Director

NP:VK:lhm
tun1/vk2


HARBOR
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TO EXISTING BUS ROUTES
FROM EXISTING BUS ROUT
FIRST
2ND
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BLVD
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BOYLSTON
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HUNTLEY
DIAMOND
FREMONT
FIGUEROA
FLOWER
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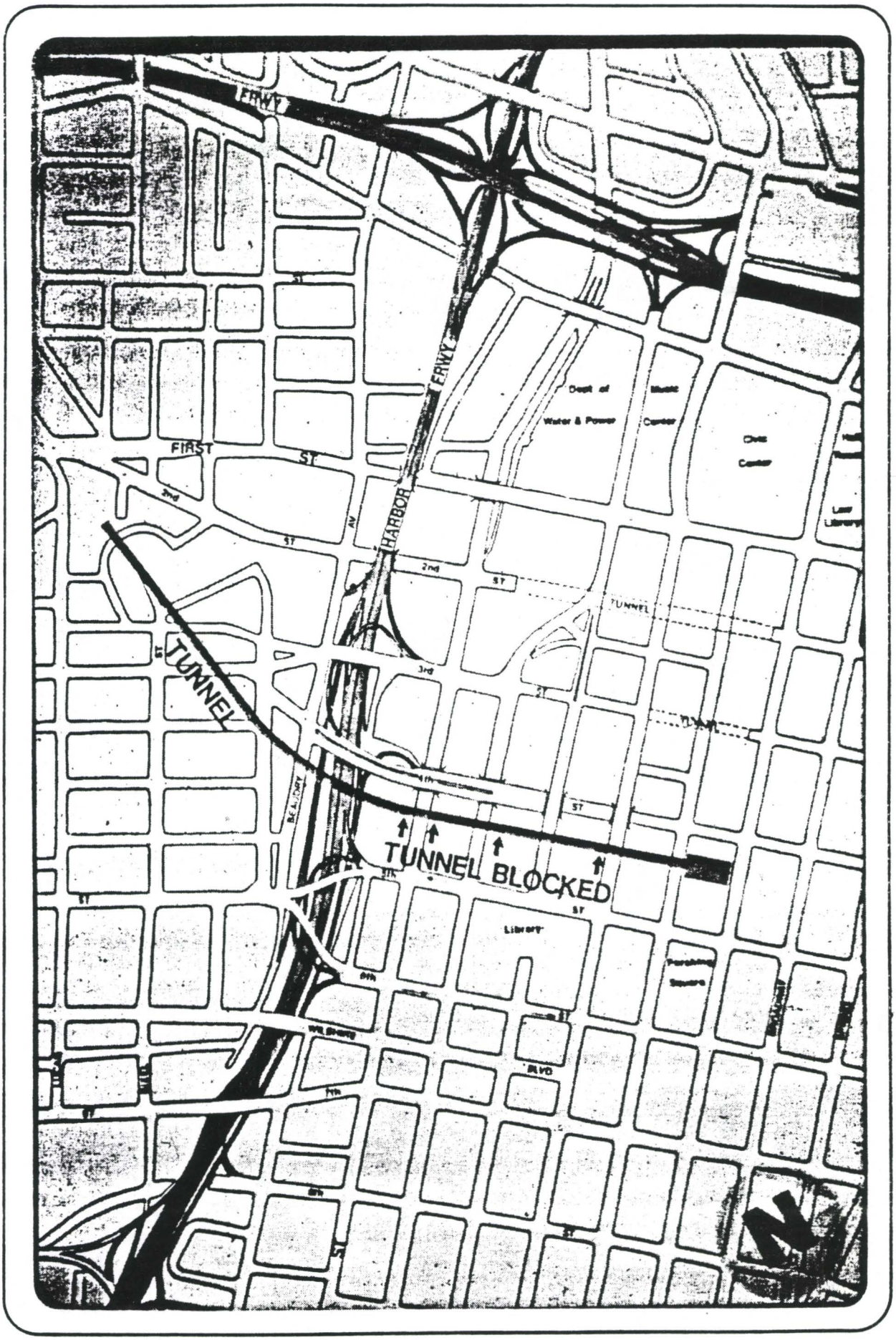
FRWY
HARBOR FRWY
FIRST ST
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TUNNEL BLOCKED

CENTER CITY WEST ASSOCIATES

October 20, 1989

Mr. Jim Sims, Director
Transportation Programs & Analysis
Los Angeles County Transportation Commission
403 West Eighth Street
Los Angeles, CA 90014

Dear Jim:

I am aware that the Los Angeles County Transportation Commission (LACTC) is considering transportation options for the Pacific Electric tunnel located at the intersection of Beverly/First/Second/Lucas/Glendale. On behalf of the Board of Directors of Center City West Associates (CCWA), I would like to support the continued exploration of the transit opportunities of this facility and the development of a plan under which the tunnel will again be utilized for a key transportation link between the Central City West area and the Central Business District.

The use of the tunnel would serve both an existing transportation need, as well as future needs, and appears to be complimentary to the HOV/Transitway concept set forth in the draft Central City West Specific Plan. As you know, the draft plan envisions an HOV/Transitway element connecting from the north down Glendale Boulevard and through the Central City West area, with a key connection on the south to a proposed extension of the Harbor Freeway Transitway which is currently planned to extend to a northern terminus of 23rd Street and Figueroa. By utilizing the tunnel for transit, it should be possible to provide a key link to those CBD-bound HOV's with improved access.

While we are supportive of your efforts, it is essential to us that the use of the tunnel be consistent with the development of the HOV/Transitway proposed in the draft Specific Plan. Further, the tunnel bisects a number of properties in the Crown Hill area. Since these properties will be developed with high-rise structures, the ability of the tunnel to structurally support such future development is integral. I believe that we can work out these issues cooperatively and to our mutual benefit.

Again, I am pleased to communicate our support for this concept. Should there be any way in which I may be of assistance to you or the Commission on this issue, please do not hesitate to contact me.

Very Truly Yours,

David Grannis

David Grannis
Association Manager

cc: Mr. Ed Rowe, General Manager
Los Angeles Department of Transportation

1055 Wilshire Blvd., Suite 1708 ■ Los Angeles, California 90017 ■ Telephone 213/481-3921

NEIL PETERSON
EXECUTIVE DIRECTOR

LACTC

Los Angeles County Transportation Commission
403 West Eighth Street
Suite 500
Los Angeles
California 90014-3096
(213) 626-0370

October 23, 1989

MEMO TO: COMMISSIONERS AND ALTERNATES - 11/25 MEETING

FROM: NEIL PETERSON

SUBJECT: TRANSIT COMMITTEE RECOMMENDATIONS ON THE PACIFIC ELECTRIC TUNNEL UNDER THE HARBOR FREEWAY

At their October 17, 1989 meeting, the Transit Committee reviewed the proposal of the "Los Angeles Mini Metro Association" to re-open the Pacific Electric Tunnel under the Harbor Freeway. Based on the presentation, the Committee revised the recommendation to the following:

- Authorize staff to discuss with the affected parties the possible opening and operation of transit in the Pacific Electric Tunnel. Report back to the Commission with additional information regarding the cost, engineering, and financing necessary to implement this project.

The Transit Committee indicated an interest in the project, but felt that it is premature to enter into formal "negotiations".

NEIL PETERSON
Executive Director

NP:VK:LHM

mm1/VK2

INTEROFFICE MEMO

LACTC

February 13, 1990

MEMO TO: JERRY GIVENS

FROM: VIC KAMHI VK

SUBJECT: STUDY OF THE PACIFIC ELECTRIC TUNNEL PROPOSAL

This memo is to confirm that the Highway/TSM Section has proposed in the mid-year budget adjustment to shift some of it consultant funding to obtain assistance in the feasibility study of the PE "Mini Metro" tunnel proposal. The amount we have proposed is $10,000.

cc: Bob Cashin

VK:me:lhm
pe2/vk2

February 20, 1990

MEMO TO: ROBERT CASHIN

FROM: VIC KAMHI

SUBJECT: PE TUNNEL

Status report on activities for the PE tunnel study.

Ownership and easement status. Jim Wiley assigned the property ownership and easement status to a new employee - Harry Fackler (extension 544, third floor east). He reported today that the county can prepared a record of ownership report, which will include the easements, in about one month (unless we need a rush job). This seems reasonable, so I am asking him to proceed.

Site Visit. I have asked Pat Roche (CRA) to set up a tour of the tunnel within the next two weeks. He is working on that, and I expect a call back today or tomorrow. Pat would have preferred waiting until the CRA report is done (a draft will be ready in "... a few weeks...") to provide "context", however, seeing the tunnels should make the reports more meaningful.

City studies. James Okazaki (City DOT) reported last week that the City's draft white paper on the tunnel will be available by the end of February. As noted above, Pat Roche is reporting a similar date for the CRA draft report. Both Okazaki and Roche have promised copies of their report as soon as it is "available".

VK:me
tun2/VK2

cc: Jerry Givens

INTEROFFICE MEMO

LACTC

February 26, 1990

MEMO TO: ROBERT CASHIN

FROM: VIC KAMHI VK

SUBJECT: PE TUNNEL

Status report on activities for the PE tunnel study.

Ownership and easement status. Jim Wiley assigned the property ownership and easement status to a new employee - Harry Fackler (extension 544, third floor east). He reported that the County can prepare a record of ownership report, which will include the easements, in about one month. This seems reasonable, so I have asked him to proceed, and I expect the report in mid-March.

Site Visit. Pat Roche (CRA) and Jim Okazaki (LA DOT) have set up a tour of the tunnel February 27, 1990. Pat would have preferred waiting until the CRA report is done (a draft will be ready in "... a few weeks...") to provide "context", however, seeing the tunnels should make the reports more meaningful. I will try to take some photos.

City studies. Jim Okazaki and Pat Roche report that the City's draft white paper on the tunnel will be available by the end of February or early in March. They both have promised copies of their report as soon as it is "available". I will keep you informed on the status.

Scope of Work. Per your direction, I have begun to draft up a scope of work for our consultant to use. It should be done by the end of the week.

VK:me:lhm
tun2/VK2

cc: Jerry Givens

DHA

Delon Hampton & Associates, Chartered
Engineers • Architects • Planners

David I. Webb. A.I.A.
Architect

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Los Angeles, CA 90014
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(213) 485-3039

JAMES M. OKAZAKI, P.E.
SENIOR TRANSPORTATION ENGINEER

RAIL TRANSIT DIVISION
DEPARTMENT OF TRANSPORTATION
CITY OF LOS ANGELES

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Community Redevelopment Agency

of the City of Los Angeles

Patrick Roche, AICP

CRA LA

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California 90013

213 977 1660
FAX # 213 977 1665

Associate City Planner-Transportation

Planning Company Associates, Inc.
550 North Brand Boulevard, Suite 530
Glendale, CA 91203
(213)481-7206
(213)481-7448 (FAX)

FACSIMILE TRANSMISSION

DATE: October 20, 1989

SENDER'S FAX #: (213) 481-7448

SENDER: David Grannis

NUMBER OF PAGES: 2
(including cover sheet)

SEND TO: Mr. Jim Sims
LACTC

RECEIVER'S FAX #: (213) 617-1299

COMMENTS:

Jim --

I put this in the mail today. I hope it is helpful. I will be sending you the additional information on the CCW Specific Plan transportation network on Monday and will be available to answer any questions you may have. Thank you. David.

INTEROFFICE MEMO

LACTC

May 14, 1990

MEMO TO JERRY GIVENS

FROM: BOB CASHIN

SUBJECT: FIRST STREET BRIDGE

We contacted the City of Los Angeles regarding Ty Rubins' concern that the First Street bridge over Lucas and Glendale was going to be torn down. The City staff reports that the proposal was included in a report prepared by Bechtal for an earlier draft of the Central City West Area Plan. The proposal was not accepted for inclusion in the draft plan.

If the City Plannning Commission or Council determines that it should be placed back in the plan and the plan is approved, the City Engineering Department would begin design work as part of the overall implementation.

We will continue to monitor this issue, and keep you posted of any change in the status of the bridge or PE tunnel as soon as we become aware of it.

VK4:TEARDOWN
VK:kgb

May 2, 1990

Mr. Jerry Givens
L.A.C.T.C
818 W. 7th Street #1100
Los Angeles, California 90014

Re: First Street Bridge

Dear Jerry:

As I told you when we last met, I have heard that the City of Los Angeles is considering tearing down the First Street bridge at Glendale and Lucas.

If this is true, something must be done to stop them. This bridge will play an important part in the H.O.V. right-of-way that is to go down Glendale and up to Bixel.

Please make the appropriate parties in the City of L.A. aware of the L.A.C.T.C.'s position on saving this type of infrastructure.

Sincerely,
TOLUCA STATION ASSOCIATES
a California limited partnership

Tye Rubins, General Partner

9538 BRIGHTON WAY, SUITE 205 - BEVERLY HILLS, CALIF. 90210 - (213) 274-1220 FAX (213) 859-4952

Name	Agency	Phone
Jerry Givens	LACTC	623-1194
Tye Rubyis	Tolnea Station Assoc.	274-1220
Lou Hersh	Bechtel	807-2460
David Grannis	CCWA	481-7206
Vic Kamhi	LACTC	213-236-9436
Bob Cashin	LACTC	236-9441
CHUCK KING	L.A.D.O.T.	485-2295

Bob Cashin
HELP ?

May 30, 1990

Mr. Jerry Givens
L.A.C.T.C.
818 W. 7th Street, #1100
Los Angeles, California 90014

Dear Jerry:

I hope this brief summary of the Mini Metro project will help.

Also, I think you'll find the enclosed L.A. Times article interesting.

If you have not already sent copies of the Fax I never got, please send them to me to bring me up to speed.

Sincerely,
TOLUCA STATION ASSOCIATES
a California limited partnership

Tye Rubins, General Partner

Vic
Info

9538 BRIGHTON WAY, SUITE 212 - BEVERLY HILLS, CALIF. 90210 - (213) 274-1220 FAX (213) 859-4952

LOS ANGELES MINI METRO

THE ADAPTIVE RE-USE OF THE PACIFIC ELECTRIC TUNNEL AND THE DEVELOPMENT OF AN RTD BUS TERMINUS AND HOV/DASH TERMINAL.

HISTORY: The Pacific Electric Tunnel runs from the corner of Beverly Blvd. and Glendale Blvd. under the Harbor Freeway to a dead end at the basement of the Union Bank building at 4th and Figueroa. It has not been in use since 1953. Its present replacement value is estimated to be $55 million.

OWNERSHIP:

a. The tunnel is owned by the City of Los Angeles.

b. A portion of the proposed western RTD bus depot/terminus is also owned by the City of Los Angeles (Public Works yard & public alley & public street).

c. The western portal area (HOC/DASH terminal) is owned by a series of partnerships collectively known as Mini Metro Associates.

PROJECT:

a. The tunnel will be realigned and a surface exit will be constructed at 4th and Figueroa (eastern portal).

b. An RTD bus depot/terminus will be constructed on City owned property adjacent to the western portal.

c. A HOV/DASH terminal will be constructed at the western portal of the tunnel.

PARTICIPATION: Mini Metro Associates will contribute land and air rights valued at between $4-$6 million for the HOV/DASH terminal and for a future HOV lane from Glendale Blvd. to Bixel St.

CONSTRUCTION COST: The project will cost $8-10 million.

FINANCING: The project will be financed by means of a purchase/lease back. Mini Metro Associates will purchase the project area and tunnel for a nominal amount and construct the improvements. The improvements will then be leased to LACTC for an amount that will fully amortize the cost of the improvements. At the end of the lease, all improvements and land and air rights would revert to LACTC.

TIME FRAME: The project will be private-sector constructed to LACTC specifications in approximately 24 months including the time needed to receive all of the appropriate governmental approvals.

AIR QUALITY AND TRANSIT CONSIDERATIONS:

a. The project will provide an opportunity (in the tunnel) for the demonstrated use of both electric and gas powered vehicles.

b. The RTD depot/terminus will reduce the number of diesel buses in the Central Business District.

c. Connection to the flexible DASH system and drive-time savings will encourage RTD bus ridership.

d. HOV use of the tunnel and the resultant drive-time savings will encourage HOV ridership and private electric and gas powered vehicles.

e. The increased viability of housing on adjacent sites will decrease automobile dependency for downtown workers.