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A PLAN FOR THE
CENTRAL RIVER FRONT
SAINT LOUIS

1928

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A PLAN FOR THE
CENTRAL RIVER FRONT
SAINT LOUIS MISSOURI



CITY PLAN COMMISSION
HARLAND BARTHOLOMEW
ENGINEER



1 9 2 8

June 1, 1928

Honorable Board of Public Service,
Saint Louis, Missouri.

Gentlemen:

The City Plan Commission has the honor to submit herewith its first report dealing with improvement of the river front. This is the result of very nearly two years of careful study of the many problems involved in attempting to deal with a situation that has much significance in the economic welfare of the central section of the city.

The report and accompanying illustrations speak for themselves. We believe the plan to be practical and in keeping with the future needs of this city, which must not be underestimated. It will take many years to fully complete the entire plan. The first steps should be taken now.

In the preparation of this report we have had the advantage of much assistance outside of our office. The frontispiece is a visualization of the central river front by Mr. Hugh Ferriss, well known artist and former St. Louisan. The colored view on Page 6, showing the relation of the whole project to the central section of the city and the view of the elevated structure on Page 23, are from the pen of Mr. Fred Graf, well known St. Louis artist. The Terminal Railroad Association has kindly furnished information with respect to construction details of the riverfront elevated and other railroad tracks. Mr. Reburn Hoffman, Traffic Engineer, and former Architect of this Commission, has given much valuable time and attention during the preparation of the plan. Grateful acknowledgment is made of these and many other services too numerous for mention.

Respectfully submitted,

CITY PLAN COMMISSION,

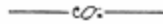
E. J. RUSSELL,

Chairman.

F. E. LAWRENCE, JR.,

Secretary.

CITY PLAN COMMISSION
OF SAINT LOUIS
1927 - 1928



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List of Illustrations

Frontispiece—by Hugh Ferriss

PLATE 1—Assessed Values in Central Business District	Page 2
PLATE 2—Traffic Flow Into Central Business District	Page 5
COLOR INSERT—by Fred Graf	Page 6
PLATE 3—General Plan of Third Street Trafficway	Page 10
PLATE 4—South Approach of Third Street Trafficway	Page 13
PLATE 5—Cross Sections of Third Street Trafficway	Page 15
PLATE 6—South Broadway Connection to Third Street Trafficway	Page 17
PLATE 7—Municipal Bridge Connection to Third Street Trafficway	Page 18
PLATE 8—North Approach of Third Street Trafficway	Page 19
PLATE 9—North Broadway Connection to Third Street Trafficway	Page 21
PLATE 10—Perspective Section of Third Street Trafficway	Page 23
PLATE 11—Typical Connection to Third Street Trafficway	Page 25
PLATE 12—Major Street Plan of St. Louis	Page 26
PLATES 13 AND 13-A—Profiles of Streets in Riverfront District	Page 30
PLATE 14—General Plan of Riverfront Plaza	Page 32
PLATE 15—Section of Riverfront Plaza	Page 33
PLATE 16—Parking Plan, Preliminary Development	Page 35
PLATE 17—Parking Plan, Upper Level	Page 36
PLATE 18—Parking Plan, Lower Level	Page 37
PLATE 19—The Central Business District	Page 39
TAILPIECE—"A Scene on the Levee"—Etching by Fred Graf.	

Introduction



THE river front was the site of the early City. So long as the City remained small in size the property extending back from the river front for two or three blocks remained in good condition and was actively used: a condition which lasted for almost a century. As ever increasing growth took place it followed the river to the north and south while the site of the early City became the principal business center. The profound influence of the river upon the early growth and development of St. Louis can be noted by the fact that the City scattered itself for twenty miles north and south along its banks. The river was the principal channel of transportation and traffic upon which much of the life of the City depended.

During the last quarter of the nineteenth century many significant changes took place. River traffic declined because of the advent of the railroads; mechanical transportation was introduced and improved forms of street surfacing were experimented with. The river was losing its influence upon the life of the City. Broadway began to develop as the City's main thoroughfare because it paralleled the river for twenty miles, was located upon the higher level uplands, was generally of commodious width and possessed through street car service.

In view of these changing conditions it is plain to see why the center of active business values shifted up Market Street where they had been fixed for the better part of a century, to the new Broadway.

With the advent of the twentieth century economic forces began to compel a rounding out of the City's growth. Westward expansion was inevitable. The site of the World's Fair in the western part of the City gave an enormous impetus to westward growth. For the past twenty-five years the majority of new growth and development has been in this direction. We have grown away from the river. (See Plate 1.) The buildings between

Wharf and Fourth Streets, opposite the central business district, were built, for the most part, many years ago. They are largely obsolete. There is no incentive for substantial replacement. The streets are exceedingly narrow, being generally 30 feet in width, and consequently quite unsuited to modern traffic needs. Grades upon these streets run as high as 13 per cent. (See Plate 13.)

The ragged condition of the property from Third Street to the river, opposite the central business district, is the combined result of—

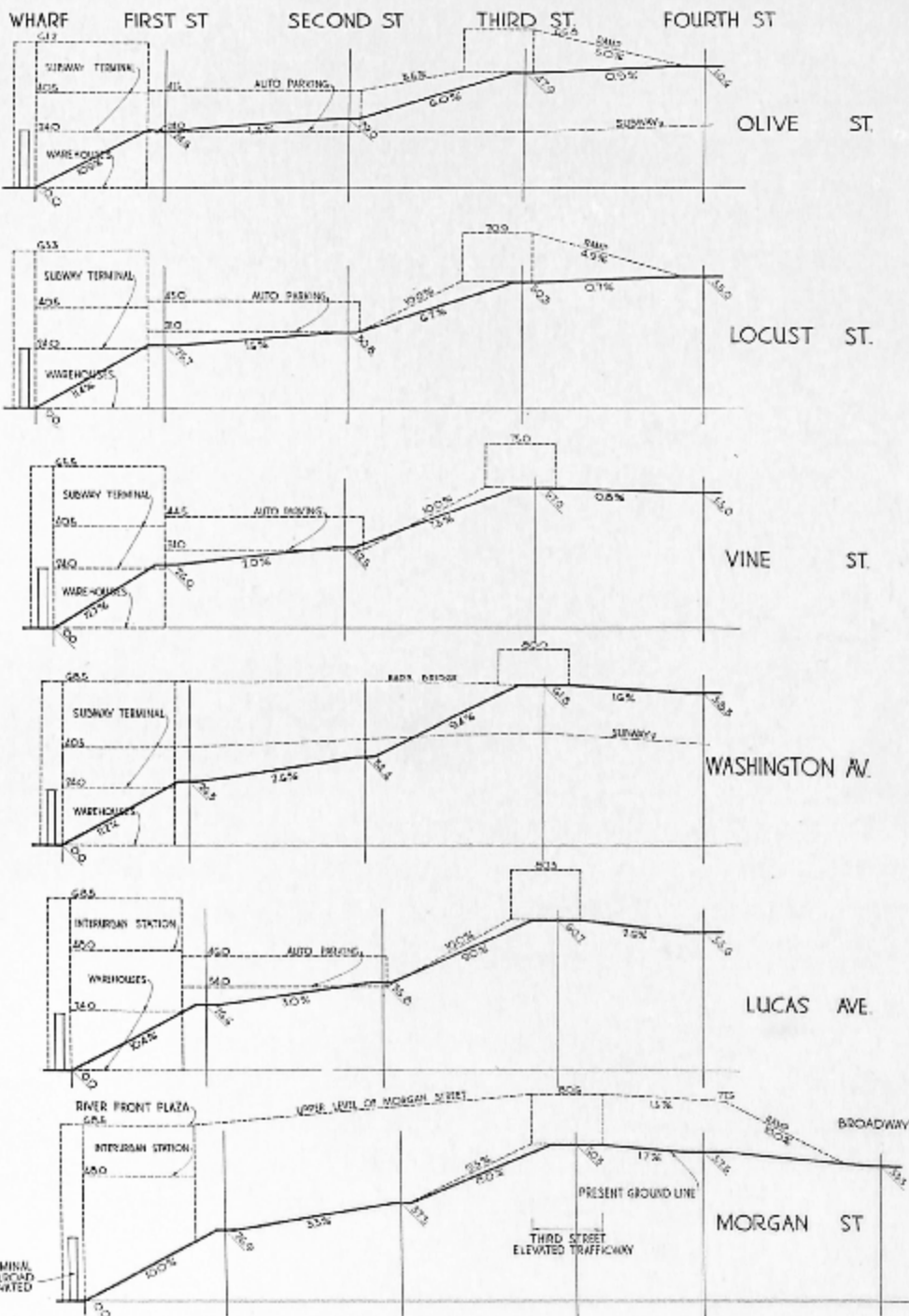
1. Westward growth of the City.
2. Decline of early forms of river traffic.
3. Inaccessibility due to narrow streets and bad grades.
4. Obsolescence of large numbers of buildings.

Function of an Adequate Plan:

In dealing with an area of such magnitude there are encountered problems which go to the very roots of the growth and development of the entire city and region. Any plan which will satisfy the popular demand for improved appearance will require large expenditure. To justify such large expenditure the plan should serve some great, useful public purpose. Fortunately, it is believed that a plan combining great utility with beauty is possible and practicable.

In recent years the blight of the river front has shown evidences of moving westward. The eastern section of the business district, particularly along Fourth Street and Broadway, where many fine buildings are located, has not merely failed to attract new growth, but has shown a tendency toward depreciation. Growth follows the lines of least resistance, and the same forces contributing to the decline of the property between Third Street and the river, will, in the future, operate to depreciate the eastern end of the present business district unless something more than ordinary measures are undertaken to forestall it.

St. Louis is the center of a large metropolitan district lying partly in



PROFILES OF STREETS

IN THE

RIVER FRONT DISTRICT

OLIVE ST. TO MORGAN ST.

CITY PLAN COMMISSION - HARLAND BARTHOLOMEW - ENGR.

VERTICAL SCALE - FEET PER INCH TO FEET
0 10 20 30 40

HORIZONTAL SCALE - FEET PER INCH TO FEET
0 50 100 150 200

Missouri and partly in Illinois. The downtown business district is the logical center of this metropolitan district. It is, however, not easily accessible from all directions. There are being developed excellent approaches from the west and one good entry from the north and from the south at Twelfth Street. While there are three bridges across the Mississippi River, only one of these three, the Eads Bridge, directly approaches the business district and that is a toll bridge, distinctly limiting its usefulness.

More direct and commodious entries to the eastern, northern and southern sides of the business district are needed. (See Plate 2.) The plan here proposed contemplates the provision of such entries, thereby affording improved opportunities for circulation, increased street capacity, stabilization of the business district and improved appearance.

Previous Plans:

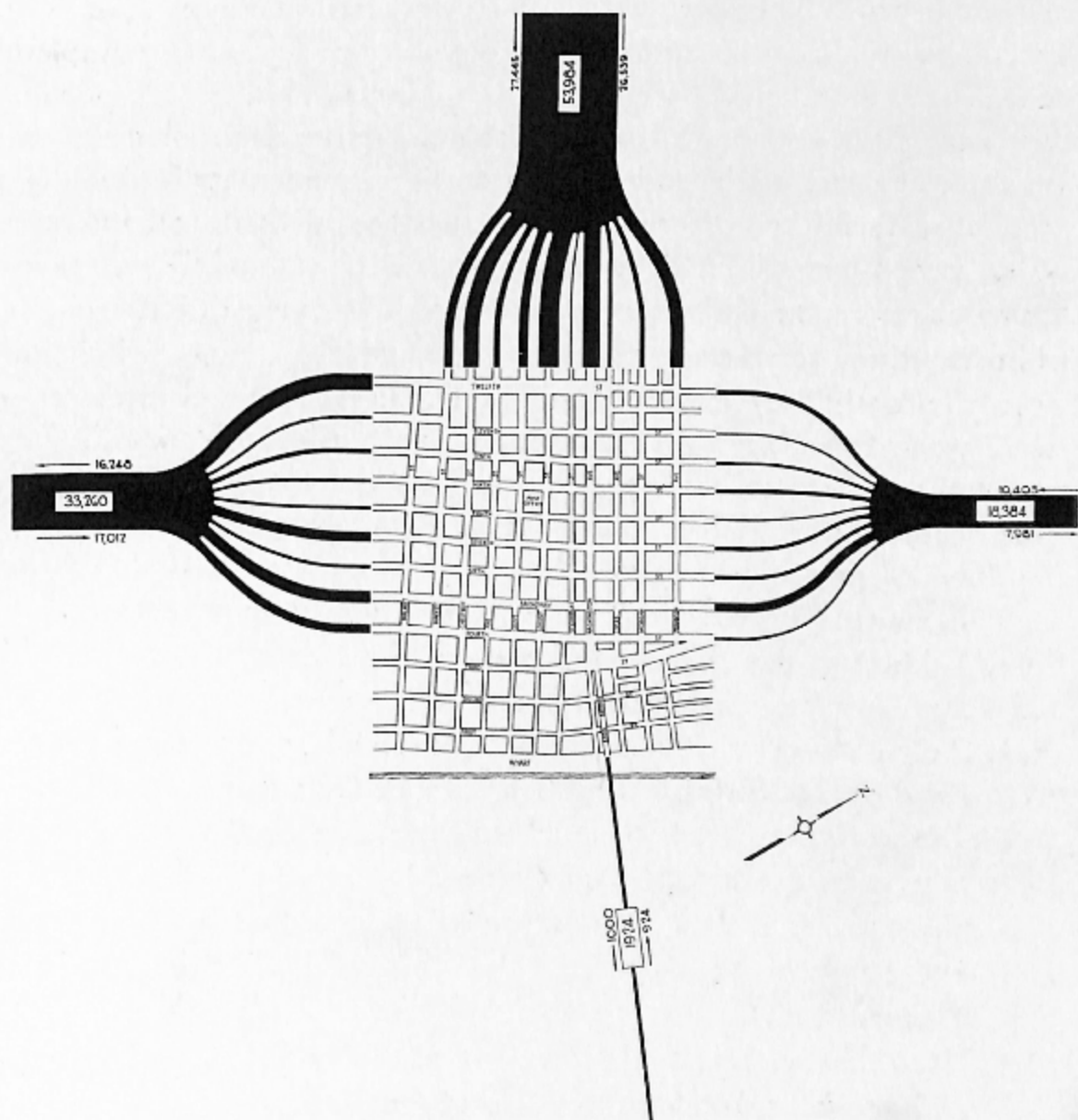
Improvement of the St. Louis river front has been the subject of much public discussion for at least twenty-five years. From time to time numerous proposals have been made and a few plans have been drawn and published, including that in the report, "A City Plan for St. Louis," published by the Civic League in 1907, that in the "Report of the Engineers' Committee" to the St. Louis Chamber of Commerce in 1922, and more recently, that contained in the report on "Rapid Transit for St. Louis," prepared by E. R. Kinsey, President of the Board of Public Service, and C. E. Smith, Consulting Engineer.

In 1913 the City Plan Commission published a report dealing generally with matters pertaining to the development of traffic upon the Mississippi River, and recommending the development of docks. An excellent map of the entire twenty miles of river front (200 foot scale) was prepared by Baxter L. Brown, Consulting Engineer for the City Plan Commission at that time.

The City Plan Commission has long desired to produce a plan that would satisfy public demands for improvement of the existing condition.

When the program for the preparation of a comprehensive city plan was published by the reorganized City Plan Commission in 1916, it was stated that studies of the river front would have to follow completion of other elements of the City Plan, such as streets, transit, transportation and zoning, in order that these fundamental factors could be determined for the entire city before any attempt could be made to produce a complete plan for the river front. The present study is the outgrowth of this policy and program. In the annual budget for 1926-1927, \$10,000 was appropriated to the City Plan Commission as the first installment of an estimated total sum of \$25,000 to make a complete study of the entire twenty miles of river front. Of this initial appropriation of \$10,000, but \$4,300 was expended. In the annual budget for 1927-1928 a second installment of \$7,400 was appropriated. Three years was the estimated time required to complete these studies.

This is a preliminary report dealing only with the central section of the river front at the east end of the central business district. (See Plate 19.) Subsequent reports will deal with remaining river front areas north and south. St. Louis has made little use of its extensive river front. The areas that should be reserved and developed for public docks and private shipping, and those which might best be used for public parks and driveways, will be carefully considered and definite plans proposed.



COMPILED FROM TRAFFIC-COUNT TAKEN IN JULY 1925 BY THE DEPARTMENT OF STREETS AND SEWERS, SAINT LOUIS
R. F. HOFFMANN-TRAFFIC ENGR.

RELATIVE VOLUMES
OF
VEHICULAR TRAFFIC
ENTERING AND LEAVING
CENTRAL BUSINESS DISTRICT
- SAINT LOUIS

AVERAGE WEEK DAY - 7:00 A.M. TO 6:00 P.M.
CITY PLAN COMMISSION - HARLAND BARTHOLOMEW, ENGR.

TRAFFIC
0 20000 40000
SCALE - 1 INCH EQUALS 40000 VEHICLES
MAP
SCALE - 1 INCH EQUALS 200 FT
100 100 0 200 400

PLATE 2

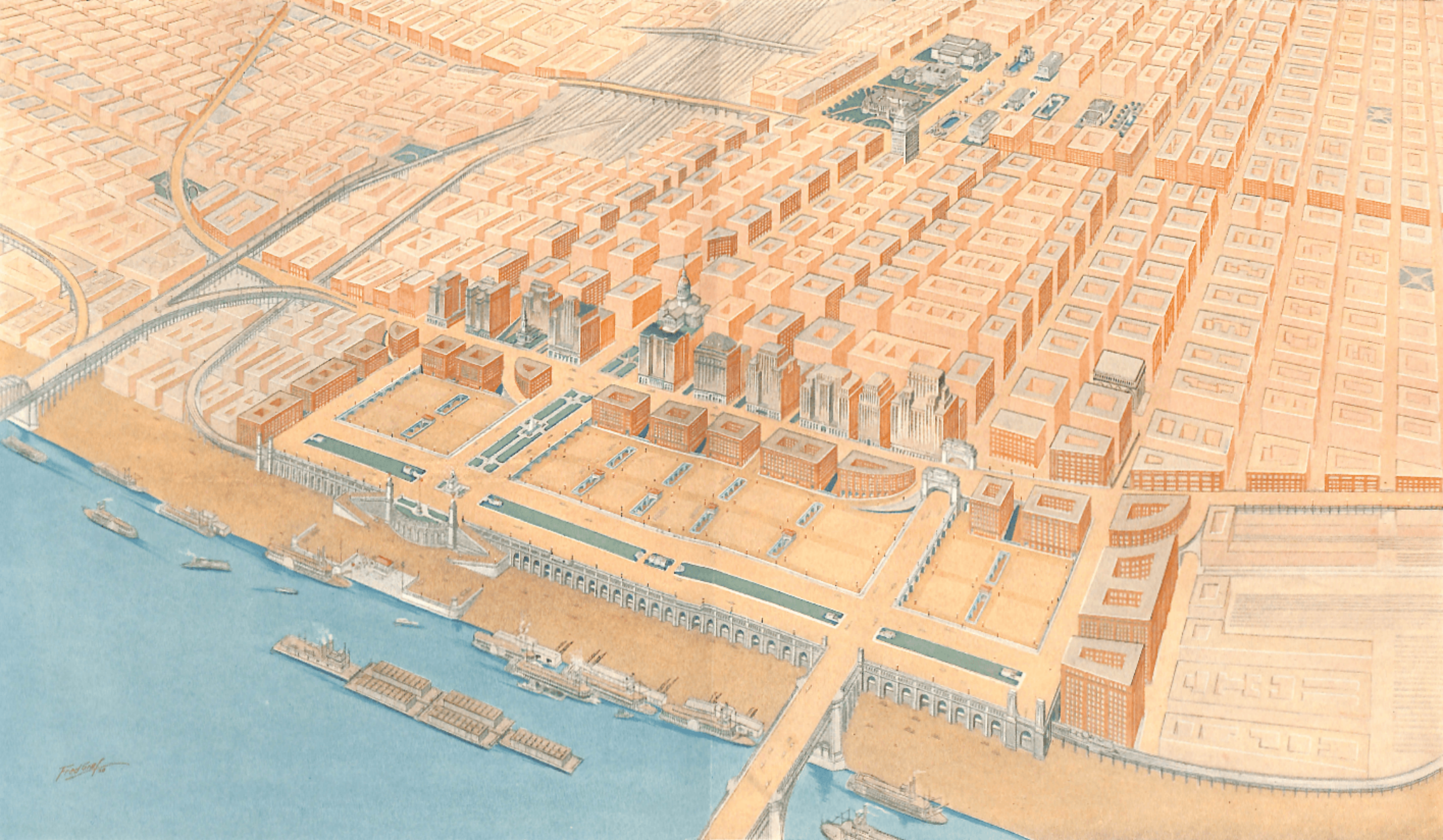
Of all the vehicles entering this district 50.2% enter from the west, 30.9% from the south, 17.1% from the north, and 1.8% from the east. The importance and necessity for new traffic entries at the east edge of this central business district is amply demonstrated. Such entries are a fundamental necessity for stabilization of values and for preventing shift, depreciation and blight.

The Plan



THE PLAN proposed in this report is composed of a number of interdependent projects. Each is necessary for fulfillment of the entire plan and to secure the full benefits to be derived from it. A detailed description of each of the component parts of the plan is given later in this report. For purposes of brevity they are here summarized as follows:

1. A new thoroughfare 100 feet wide from the north and northwestern part of the City to Third Street in the business district.
2. A new thoroughfare 100 feet wide from the south and southwestern part of the City to Third Street in the business district.
3. Construction of elevated roadways in these two thoroughfares, having capacity for six lines of high-speed, non-stop traffic.
4. Widening and double-decking of Third Street (140 feet wide) from Poplar Street to Morgan Street.
5. Acquisition of all the property between Third Street and the river from Spruce Street to Franklin Avenue for a riverfront plaza.
6. Construction of a high level mall between Market and Chestnut Streets from the Old Court House to the river, with extensions along the river front connecting at the south with Clark Avenue and on the north with the upper deck of Eads Bridge and with Morgan Street.
7. Use of lower levels of riverfront plaza for public parking space and garage, subway terminals, and the like.
8. Direct connection between Third Street high level roadway and upper deck of the Municipal Bridge.
9. Widening of Locust, Olive, Pine and Walnut Streets between Third and Fourth Streets to provide direct access between the business district and the upper level of widened Third Street.



Some of the numerous benefits and advantages to be accomplished by this plan may be briefly summarized as follows:

1. Shifting of the business district will be permanently checked.
2. Property values of the eastern end of the business district will be stabilized and greatly enhanced.
3. The greatly increased street capacity will be a decided advantage to traffic circulation facilities throughout the City, since the plan is completely co-ordinated with the Major Street Plan.
4. The long sought improvement of the river front will be accomplished in a most monumental manner.
5. Demand for public parking space and garage facilities upon a large scale will be satisfied, since the plan provides an ultimate capacity for the accommodation of more than 8,000 automobiles.
6. Both vehicular and water approach to the City of St. Louis will be highly attractive and inviting.

Estimated Cost of Plan



FAIRLY accurate estimate of the probable cost of this improvement is indicated in the following summary. This is arranged to show the three steps into which the construction program may be divided.

Double-decking Third Street and Approach Thoroughfares:

Acquisition of land and improvements for new right-of-way 100 feet wide, widening Third Street to 140 feet, building of double-decked street, paving, lighting, and complete improvement of project..... \$19,000,000

Riverfront Plaza:

Acquisition land and improvements (Third Street to river and Spruce to Franklin, block bounded by Third, Fourth, Market and Chestnut, and eastern half of block bounded by Third, Fourth, Walnut and Elm—40 $\frac{1}{2}$ blocks in all), grading and shaping for surface automobile parking, construction of high-level driveway and mall from Old Court House to the river..... \$22,000,000

Extension of high-level driveway and mall along river front with connections to Clark Avenue on the south, upper deck of Eads Bridge and Morgan Street on the north, fully paved, lighted and improved, and with ramp connections to the levee; construction of double-level garage in remaining area.....\$ 9,000,000

Total Cost..... \$50,000,000

Distribution of the Cost:

Under the present constitution and laws of the State of Missouri, and the charter of the City of St. Louis, it would be difficult to carry out a project of the character and magnitude here proposed in a complete and satisfactory manner. It should not be undertaken piece-meal because of the fundamental inter-relation of its parts. Present laws permit but two methods of meeting the cost, i. e., by public bond issue; by special assessment of benefits, or by a combination of these two methods.

To meet the cost entirely by public bond issue would seriously impair the City's ability to issue bonds for other public needs and absorb a disproportionate share of the amount of bonds that can be issued by the City, particularly under present limitations. Undoubtedly, a portion of the cost should be borne by public bond issue, but it is not considered practicable or advisable to state what proportion should be so borne at this time.

This project will greatly enhance property values in the eastern portion of the business district. There will, undoubtedly, be possible recovery of a substantial part of the total cost through special assessment of benefits, as is now done in street widening projects. The full cost of the project could not be so recovered, however.

A third method for meeting a portion of the cost of this project has been considered. It is known as excess condemnation. (See page 38.) Fourteen states in the Union now enjoy such authority. An amendment to the constitution of the State of Missouri would be necessary before it could be used in connection with the present project. Were such authority now available, it would be possible to sell or lease certain portions of the riverfront plaza area for private purposes, with strict control over architectural design and character of use, thereby accomplishing two highly important results, i. e., (1) substantial recovery of cost, and (2) resultant erection of private structures of such magnitude, desirability, and beauty,

as to greatly enhance the total character of the entire project and its surroundings.

A few minor legislative changes are needed for the satisfactory completion of a project of the magnitude of the one here proposed; likewise, some modification of present procedure in condemnation work. There is need for legislation clarifying the authority of the City to levy assessments for benefit for construction costs. Assessments may now be levied only for the cost of land and improvements acquired for any given project. There should also be passed local ordinances permitting installment payments for benefit assessments over a period of from seven to ten years, as contemplated by the charter, instead of single full cash payment as required by present practice. This would necessitate the establishment of a large revolving fund.

With such new legislative authority it is confidently believed that the cost of the project here proposed could be equitably met through a combination of public bond issue, special assessment of benefits, and resale or lease of certain property appropriately safeguarded. No recommendation is made at this time as to the relative proportions of the total cost which could be met by these three methods. This can only be determined after the character of new legislation is known.

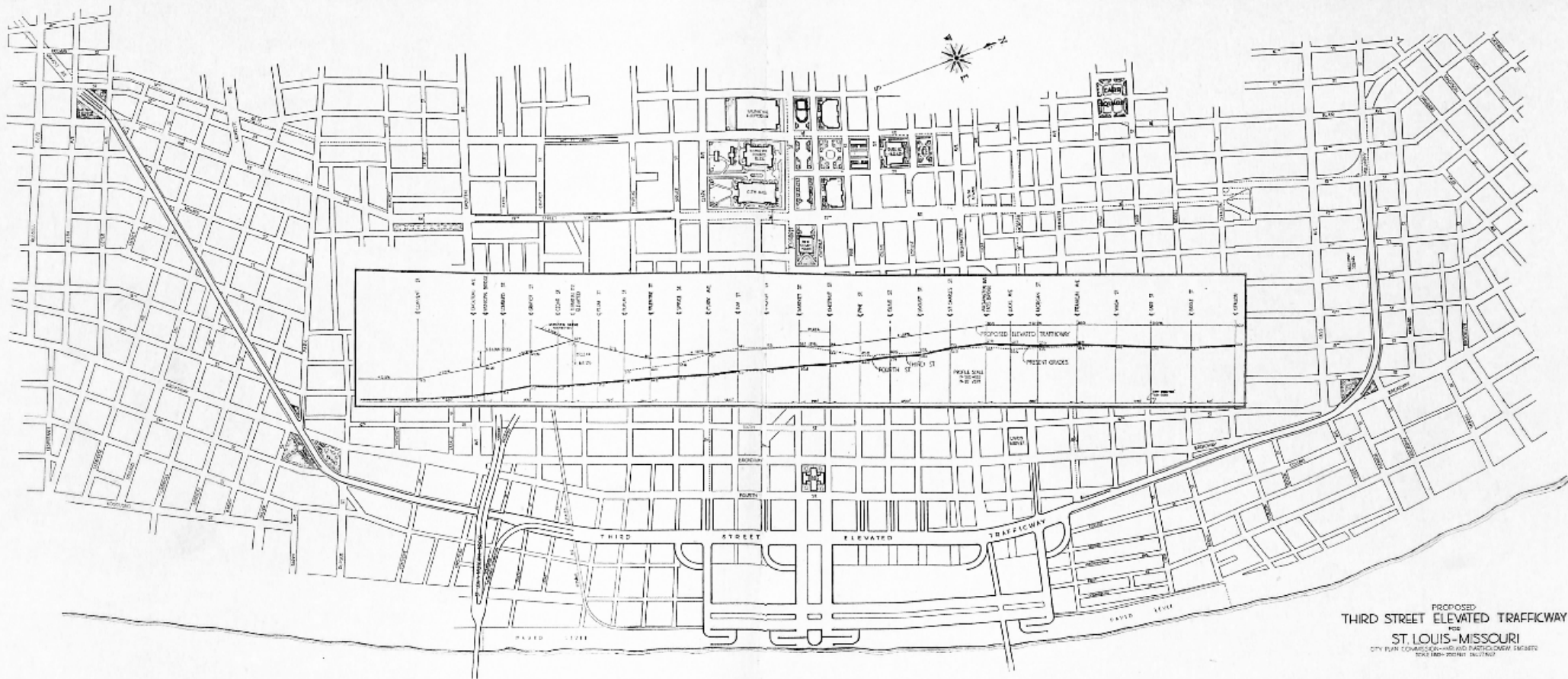


PLATE 3

The approach thoroughfares are carefully located in relation to the local streets. They have easy grades and no sharp curves.

Description of the Double-decked Third Street and Approach Thoroughfares



LATE 3 illustrates the location of the two new double-deck approach thoroughfares. They are direct extensions, respectively, of the principal thoroughfare in the southern part of the City, Gravois Avenue, and of the principal thoroughfare in the northern part of the City, the North Twelfth Street route.

Southern Terminus and Location of Route:

The southern approach takes off directly in the center of the new Gravois Avenue connection to Twelfth Street. It rises from the present ground level at approximately Thirteenth Street and Allen Avenue. It offers little or no interference to street car and vehicular movement on the South Twelfth-Gravois Avenue route, for the roadway is split into two ramps of 5.5 per cent grade each on either side of the trolley tracks, thus interfering in no way with the movement of the street car traffic and at the same time making possible the merging of the elevated roadway traffic with through traffic on the Twelfth Street-Gravois route without crossings or left-hand turns. (See Plate 4.) A small plaza is created by acquisition of the two blocks between Twelfth and Thirteenth Streets from Geyer Avenue to Allen Avenue.

The elevated roadway passes over Twelfth Street with a clearance of 16 feet, which is made possible by the grade of the approach ramps and by the difference in level of the present ground. The elevation of the present intersection of Thirteenth and Allen Avenue is 91.9 feet and that of Twelfth Street and Geyer Avenue 83.4 feet. Traffic movements on South Twelfth Street and on Geyer Avenue will continue as at present

and sufficient new roadway room is provided for all probable through traffic movements on the proposed new South Twelfth Street-Gravois Avenue route. The spacing and arranging of columns to support the elevated roadway have been so designed as to facilitate, rather than obstruct, traffic movement at all street intersections. This is of particular importance where the new thoroughfare passes diagonally through an existing street intersection, such as that at Twelfth and Geyer, Eighth and Marion, Park and Broadway, although the route generally is designed to avoid existing street intersections wherever possible.

This new route will be 100 feet wide, and involves a complete new right-of-way from Thirteenth and Allen to Third and Rutger. On Third Street from Allen to Cedar Street it involves an increase in the width from 38 feet to 100 feet by taking 62 feet on the east side of the street.

Design of Elevated Structure:

Plate 5 shows a cross-section of this proposed 100-foot thoroughfare. It provides for six lines of vehicles upon the upper level and for eight lines of vehicles on the lower level of the street. The upper deck will provide for high-speed, practically non-stop, movement, and will be used largely by automobiles and the lighter forms of delivery trucks. It will have a 54-foot roadway with two sidewalks, each 3 feet 6 inches wide, and an ornamental balustrade 4 feet high. The elevated roadway will be supported by three rows of columns, one in the exact center of the lower level street and one 22 feet on either side thereof. This will permit of two roadways, each 20 feet wide, for the accommodation of two lines of traffic between each set of columns, with an 18-foot roadway between the outside columns and the curbs on either side of the street, thus permitting one line of parked vehicles and an additional line of moving vehicles. Sidewalks of 9 feet each are considered to be sufficient for such pedestrian traffic as may be expected upon this thoroughfare. A minimum clearance of 16 feet is provided for vehicles using the lower level roadway.

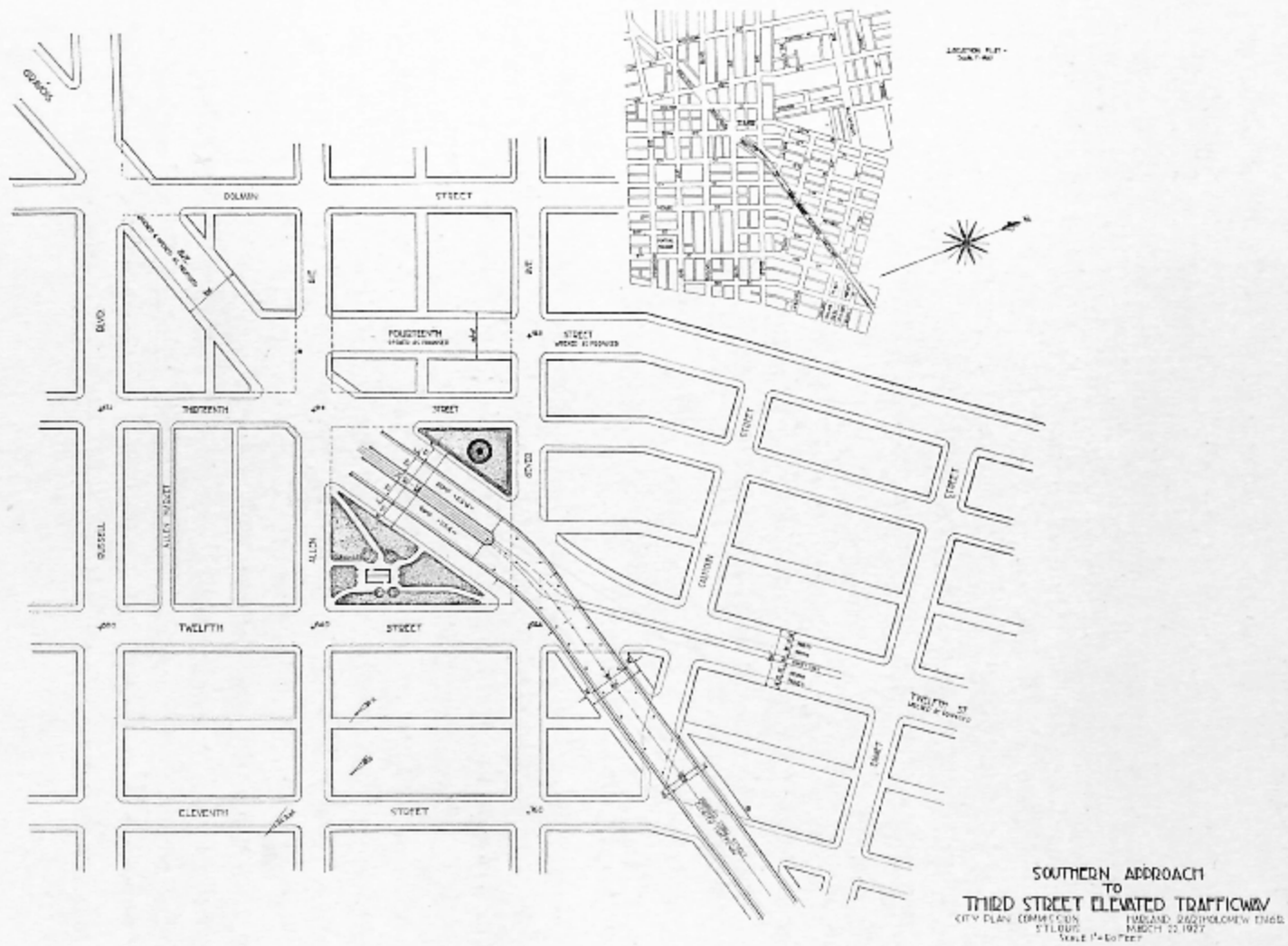


PLATE 4

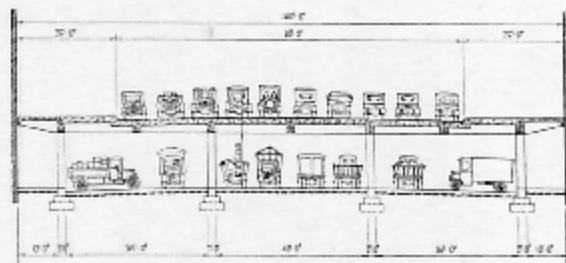
A large plaza is needed here where the southern approach thoroughfare meets the South Twelfth-Gravois and the South Fourteenth Street routes.

South Broadway Connection:

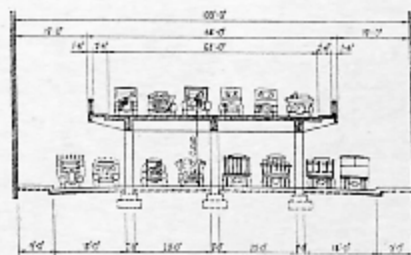
At Broadway it is considered advisable and necessary to provide for connection between the elevated roadway and the three existing major streets converging at this location, i. e., Broadway, Park Avenue, and South Seventh Street. These connections are accomplished in the form of side ramps, that for west-bound traffic leading directly into Park Avenue at Seventh Street and having a grade of 1.30 per cent. The ramp for east-bound traffic would begin approximately 40 feet east of Broadway, ascending at a 6 per cent grade. Plate 6 shows these connections, which are the only connections to the upper level roadway between Thirteenth and Geyer Avenue and Third and Clark Avenue. These ramp connections are so arranged as to permit of vehicular movement without interference with through traffic upon the upper level roadway.

Municipal Bridge Connection:

Traffic now entering St. Louis from the Municipal Bridge comes to grade at Seventh Street immediately north of Chouteau Avenue and proceeds north on Seventh Street to the central business district, or west on Chouteau Avenue to other sections of the City. It is possible to make a short, direct entry into the business district by constructing an approach from the vehicle deck of the Municipal Bridge immediately west of the west pier to the proposed new elevated roadway at Third Street, midway between Plum and Cedar Streets. This approach is planned with an overall width of 50 feet, having a 40-foot roadway sufficient for four lines of vehicles, with two sidewalks of approximately 4 feet each. This approach rises from the center of the elevated roadway on a grade of 3 per cent, and with a curvature of approximately 400 foot radius. (See Plate 7.)



FOR BUSINESS DISTRICT



FOR INDUSTRIAL DISTRICT

TYPICAL SECTIONS
 PROPOSED THIRD STREET ELEVATED TRAFFICWAY

CITY PLANNING COMMISSION ST. LOUIS, MISSOURI
 INGOLD BASTIEN-ENGINEERS NOV-13 1928
 SCALE - 1/4" = 10 FEET

PLATE 5

On the upper level of the approach thoroughfares no access is provided to abutting property so that high speed is encouraged. The new, wide, low-level roadway has large capacity for heavy haul traffic now badly needed between freight stations on North Broadway and Mill Creek Valley. Note column spacing to facilitate traffic movement.

Northern Terminus and Location of Route:

The northern terminus of the double-deck approach thoroughfare is at Thirteenth and Mullanphy Streets. Mullanphy Street is a part of the North Twelfth Street route between Thirteenth and Fifteenth Streets. By using Mullanphy Street east of Thirteenth Street for the new double-deck approach thoroughfare, traffic approaching the center of the City from the north and west may proceed directly on to the new double-deck thoroughfare. The approach to the upper deck of the elevated roadway begins at the east line of Thirteenth Street and rises on a 7 per cent grade in order to permit of a 16-foot under-clearance at Twelfth Street where the McKinley Interurban cars now operate. There being no street cars in Mullanphy Street east of Thirteenth Street, the elevated roadway comes to grade in a single ramp in the center of Mullanphy Street. Between Thirteenth and Twelfth Streets, Mullanphy Street is widened from its present width of 60 feet to a new width of 162 feet, by taking 71 feet on the north side of the street and 31 feet on the south side of the street. This permits of three lines of traffic movement in Mullanphy Street on either side of the ramp approach to the elevated roadway. (See Plate 8.) East of Twelfth Street, traffic uses two levels on Mullanphy Street, which is widened to 100 feet by taking 40 feet from the north side of the street. The route is east on Mullanphy to Broadway, then follows Broadway and Third Street south to Franklin Avenue. Fortunately, no widening is needed between Mullanphy and Franklin Avenue, for both Broadway and Third Street have a width of 100 feet.

The design of the northern approach double-deck thoroughfare is similar to that previously described for the southern approach thoroughfare, i. e., a six-line roadway on the elevated deck and an eight-line roadway on the lower ground level, with similar column spacing and minimum 16-foot under-clearance. (See Plate 5.)

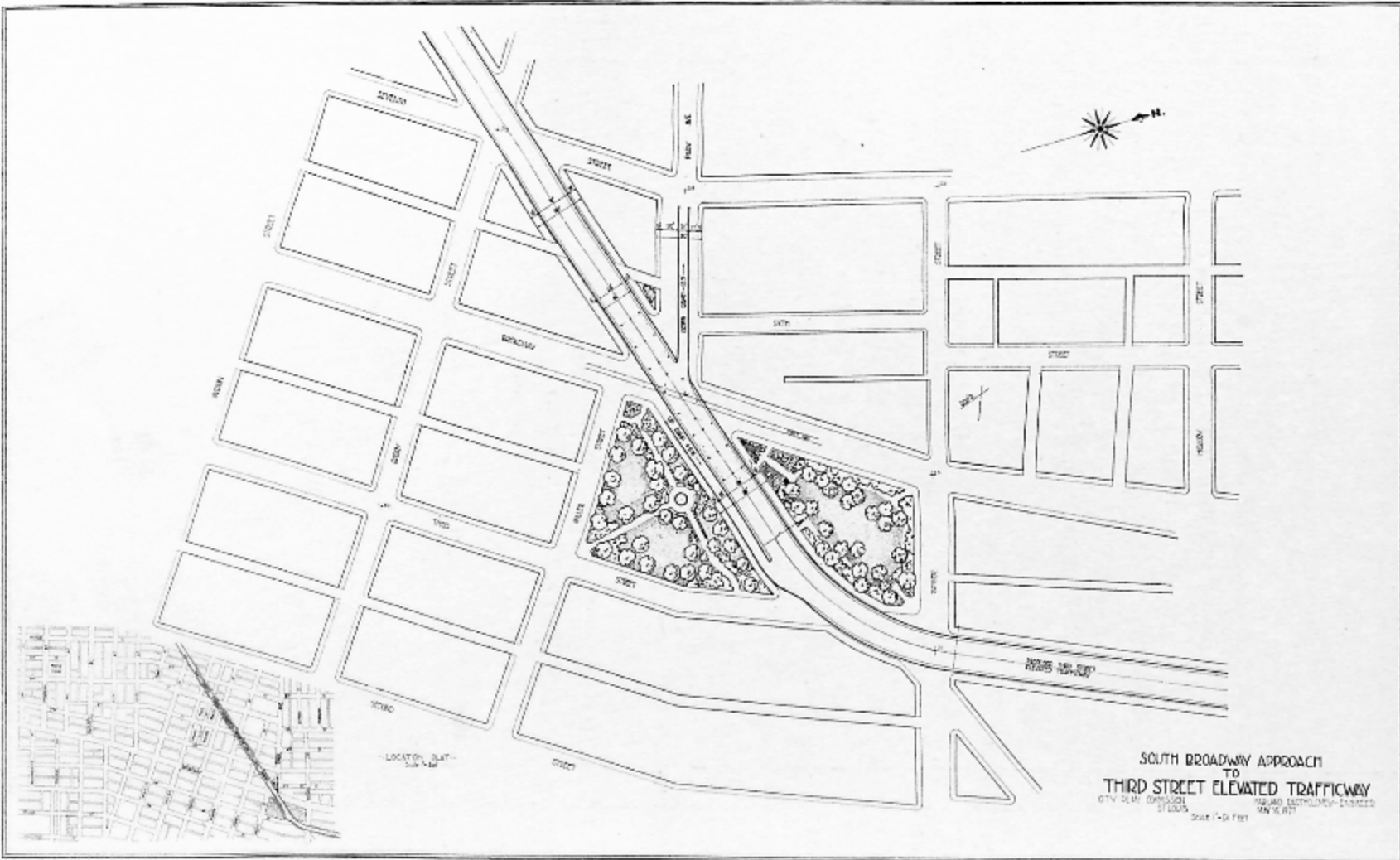


PLATE 6

A large open space here will be of advantage to traffic and will improve the general appearance of the neighborhood.

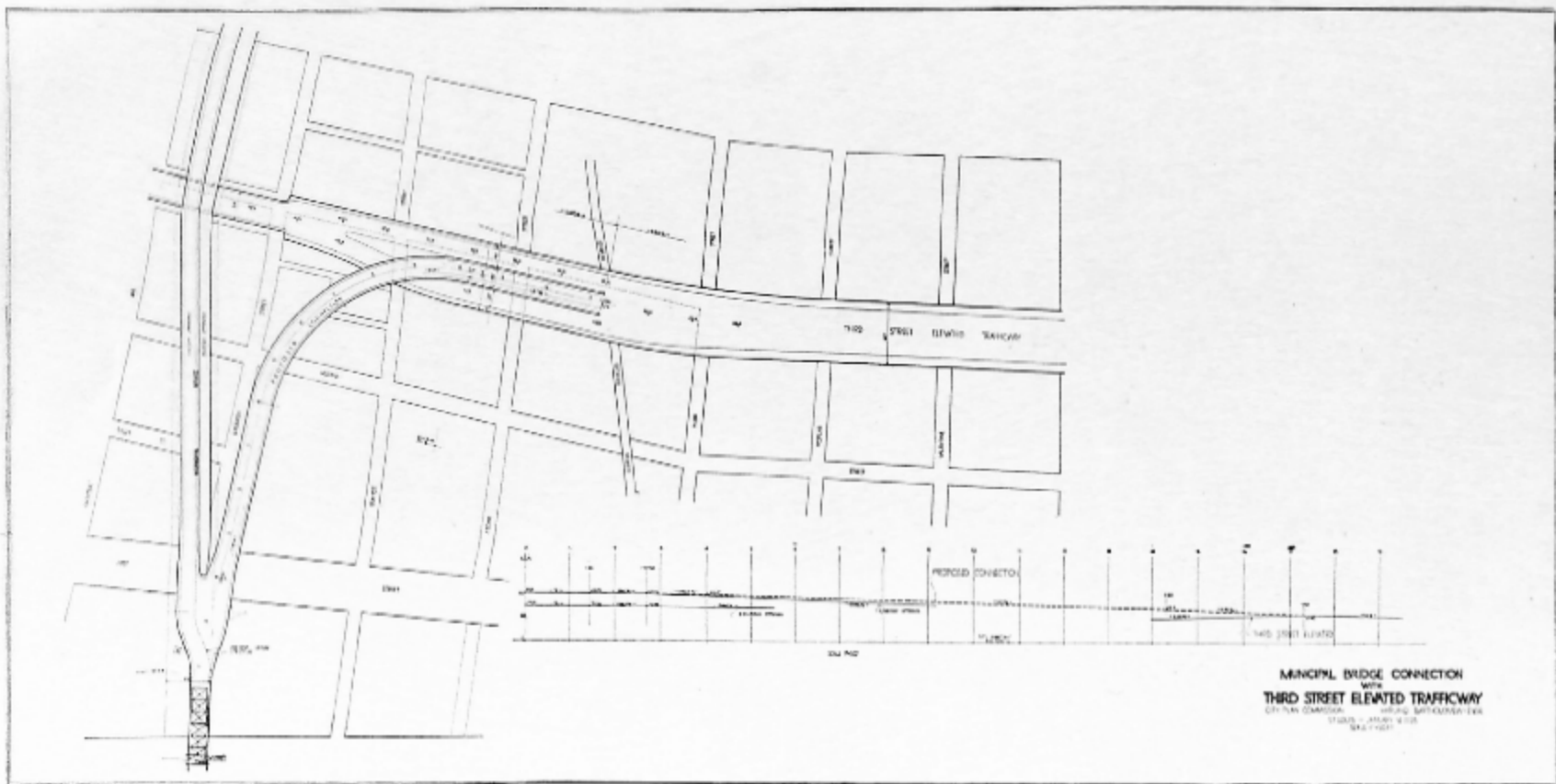


PLATE 7

Traffic coming to St. Louis from the east and south via the Municipal Bridge will here find an attractive direct approach to the business district.

North Broadway Connection:

The upper deck of the northern approach thoroughfare is also a high-speed, non-stop thoroughfare, having but one connection with existing street grades between Thirteenth and Mullanphy Streets and Third and Franklin Avenue. This one connection with existing streets occurs at Broadway and Seventh Street. For the accommodation of a large volume of travel using Broadway north of Mullanphy, it was considered advisable to provide side approach ramps in the block bounded by Mullanphy, Cass, Broadway and Seventh Streets. These ramps come to grade at Seventh Street, that for north and west-bound traffic having a grade of 9.0 per cent, and that for south and east-bound traffic having a grade of 7.0 per cent. (See Plate 9.) Being side ramps, they will in no way interfere with through traffic movement upon the elevated roadway.

Double-decked Third Street in Central Business District:

Between Franklin Avenue and Cedar Street, Third Street is widened to 140 feet by taking property entirely on the east side of the present street. The amount of property so taken varies considerably, owing to variable width of the present street, i. e., 38 feet to 100 feet. The upper level roadway is extended to the property lines on either side of the street and becomes a wide distributor street in place of the high-speed, non-stop traffic approach thoroughfares from the north and south. (See Plate 10.) The upper deck roadway has a width of 90 feet, with 25-foot side walks on either side. This permits of one line of vehicles at each curb and four lines of moving vehicles in both directions. The inner lane for moving vehicles should be used as a reservoir at street intersections for the accommodation of traffic intending to make a left-hand turn.

On the lower level the column design and spacing is arranged to carry the increased load of the widened elevated roadway. Here four sets of columns are used, so arranged as to permit a 40-foot roadway for the accommodation of four lines of through traffic movement in the center

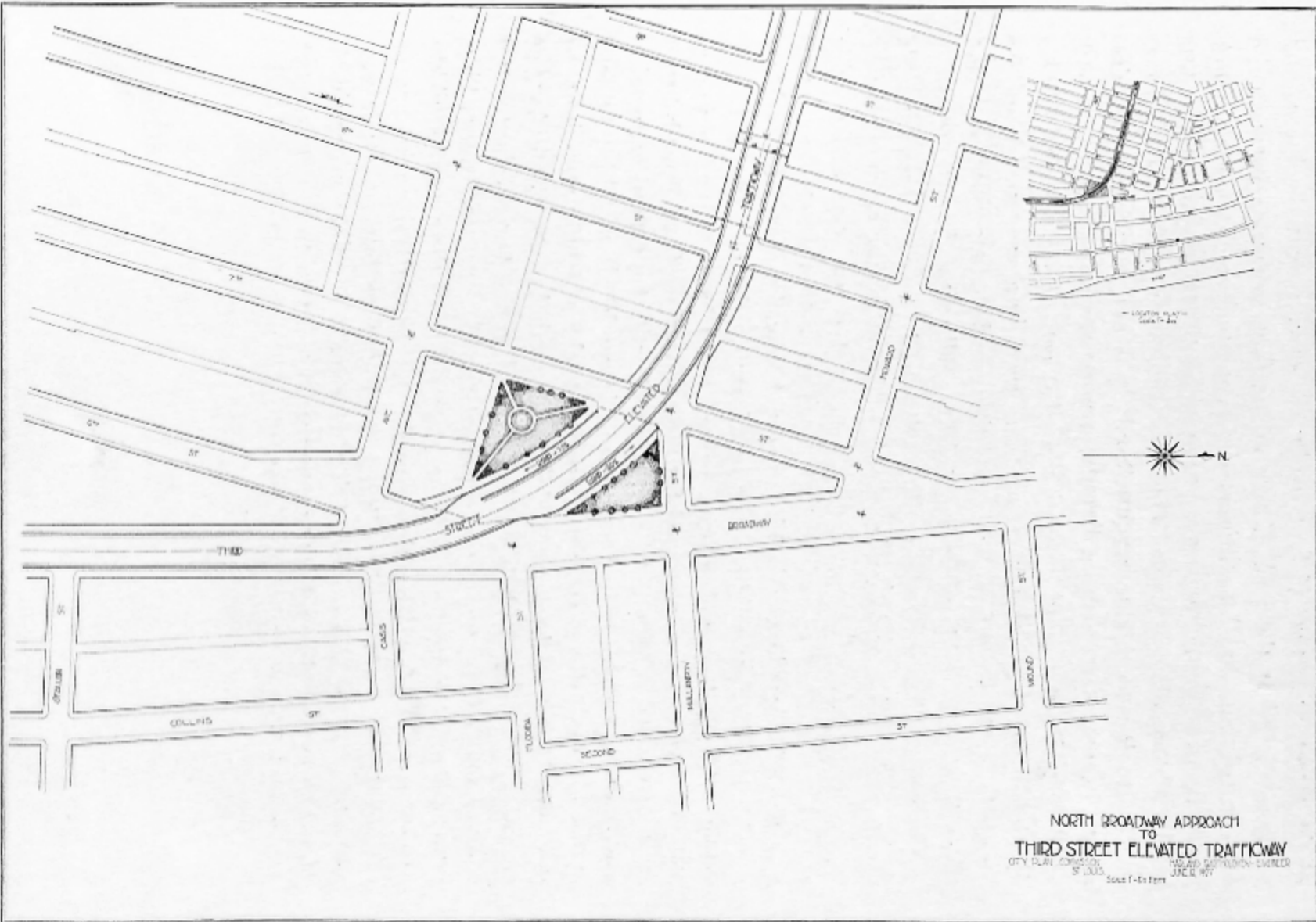


PLATE 9

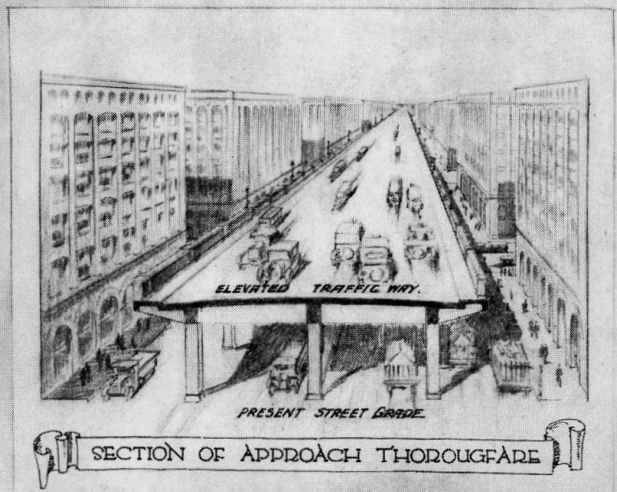
An opportunity for traffic coming from or destined to North Broadway and vicinity is here provided with direct access to the elevated trafficway.

of the street, with two 36-foot roadways between center columns and columns placed at the curb. There are 10-foot sidewalks between the outside columns and buildings at the property lines. (See Plate 5.) A minimum of 16-foot clearance is provided for the traffic using this lower level roadway.

Ventilation of this lower level will be secured without difficulty, since all cross streets will be entirely open on the east and west.

Direct connection with practically all streets of the present business district is secured by ramp connections extending westward from the upper level thoroughfare, while existing grade connections with the lower level thoroughfare is preserved upon all east and west streets.

At Clark Avenue, Walnut, Pine, Olive and Locust Streets, two side ramps each 27 feet wide are provided, sufficient for the accommodation of three lines of traffic in each direction. Central roadways 20 feet wide are left in the center of each of these business district streets for connection to the lower level of Third Street. Sidewalks of 11 feet each are provided. All approaching ramps terminate on the east line of Fourth Street, with grades ranging from 0.3 per cent to a maximum of 5.0 per cent. Similar grades are secured for the connections from Fourth Street to the lower level of Third Street. (See Plate 11 for typical connection between Fourth Street and upper and lower levels of Third Street.) Construction of these ramps will necessitate the widening of each of the thoroughfares used between Third and Fourth Streets. Clark Avenue is now 32 feet wide and should be widened to 100 feet. Walnut Street is to be widened to 100 feet as a part of the Market Street route. Pine, Olive and Locust Streets should be increased from their present widths of 32 feet to 100 feet, by taking property on the north side of the street in each instance. Fortunately, no large buildings interfere with such widenings, while, as a matter of fact, practically all of the properties in these blocks would be rebuilt with newer, larger structures in any event, as a result of this great improvement.

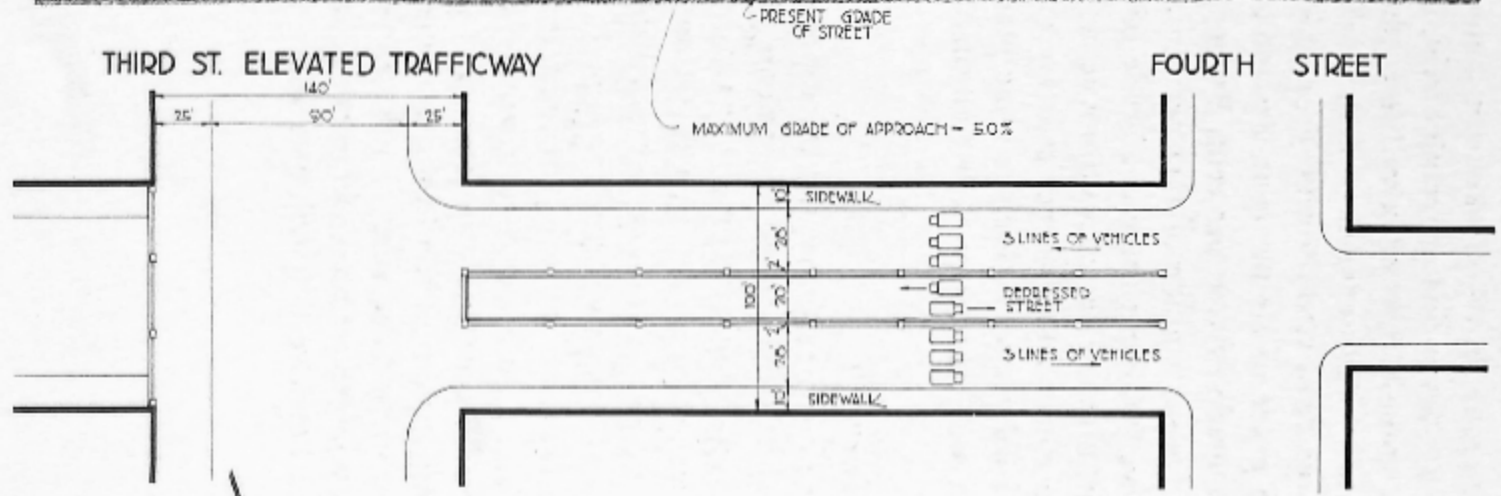


SECTION OF APPROACH THOROUGHFARE



SECTION OF THIRD STREET ELEVATED TRAFFIC WAY

The high-level thoroughfare can be made attractive in design and practically noiseless.



TYPICAL CONNECTION
 OF THE
THIRD STREET ELEVATED TRAFFICWAY
 WITH THE
CENTRAL BUSINESS DISTRICT
ST. LOUIS
 CITY PLAN COMMISSION — HARLAND BARTHOLOMEW-ENGR

SCALE - 1 INCH EQUALS 30 FEET
 30 15 0 30 60

Direct connections, of easy grade, with the streets of the business district are made from both the upper and lower levels of Third Street.

Market Street and Chestnut Street will connect only with the upper level roadway on Third Street. It is proposed to acquire all of the block bounded by Third, Fourth, Market and Chestnut Streets, and to construct a driveway and mall from the Old Court House to the river.

No physical connection between the upper level roadway and Washington Avenue is contemplated, since it is believed that once the Eads Bridge is relieved of vehicle tolls, it would be best to have a grade separation at the intersection of these two great arteries of travel.

Morgan Street is being widened to 80 feet at the present time. In order to avoid further condemnation it is proposed to create a ramp connection to the upper level of Third Street in the center of Morgan Street, rather than at the sides, as contemplated elsewhere. This ramp would have a width of 36 feet for the accommodation of two lines of traffic in each direction, leaving two 18-foot roadways at grade on either side of this ramp and 4-foot sidewalks. If additional sidewalk width is needed, it should be provided if and when new structures are built. Because of the restricted distance between Third Street and Fourth Street at Morgan, the ramp is carried over Fourth Street and thence down on a 10 per cent grade to a connection with Broadway 30 feet back from the east property line.

In order to provide direct connection with Franklin Avenue a side ramp is constructed on the west side of the elevated roadway immediately north of Franklin Avenue on a grade of 10 per cent. This affords direct street grade communication for all inbound traffic. Outbound traffic in this locality would use the Morgan Street ramp.

Grades and Clearances:

As previously described, the elevated roadway in the north and south approach thoroughfares has a minimum clearance of 16 feet above the lower level. The double-deck roadway in Third Street between Cedar Street and Franklin Avenue provides a minimum clearance of 16 feet.

Between Plum and Cedar Streets the elevated roadway must pass over the high line of the Terminal Railroad. At this point the elevated roadway provides a clearance of 21 feet above the railroad tracks. At no point along the entire double-deck street is the grade in excess of 3 per cent. Between Broadway and Eleventh Street, in the southern part of the City, there is a grade of 2.9 per cent. From Chouteau Avenue north to where the elevated roadway passes over the high line of the Terminal Railroad, there is a grade of 3.00 per cent. From this latter point to Valentine Street there is a grade of 2.5 per cent. From Valentine Street to Market Street there is a grade of 1.00 per cent. From Chestnut Street to Washington Avenue there is a grade of 1.44 per cent. From Washington Avenue to North Twelfth Street there is a grade of less than 0.50 per cent, except for a short distance between Cass Avenue and Ninth Street where grades of 1.30 per cent and 2.30 per cent are encountered. (See Plate 3.) The elevated roadway will have the same grade as present ground levels on the north and south approach thoroughfares.

Traffic Movements:

The elevated roadway and its approaches provide for a number of separate and distinct traffic movements greatly to be desired. The lower level roadway should become an extensively used heavy haul thoroughfare between shippers and freight stations along North Broadway and in the Mill Creek Valley and intermediate points. Much of this heavy trucking traffic is now forced through the streets of the business district, with disadvantage and delay to itself and to the traffic of the business district. The new lower level roadway will be commodious in width, easy in grade, and free from street car tracks.

The principal function of the upper level roadway will be to provide quick and unimpeded access to the eastern end of the business district for large volumes of traffic from the south and southwest and from the north and northwest. It will also afford a much improved opportunity

MAP OF THE CITY OF ST. LOUIS MAJOR-STREET-PLAN

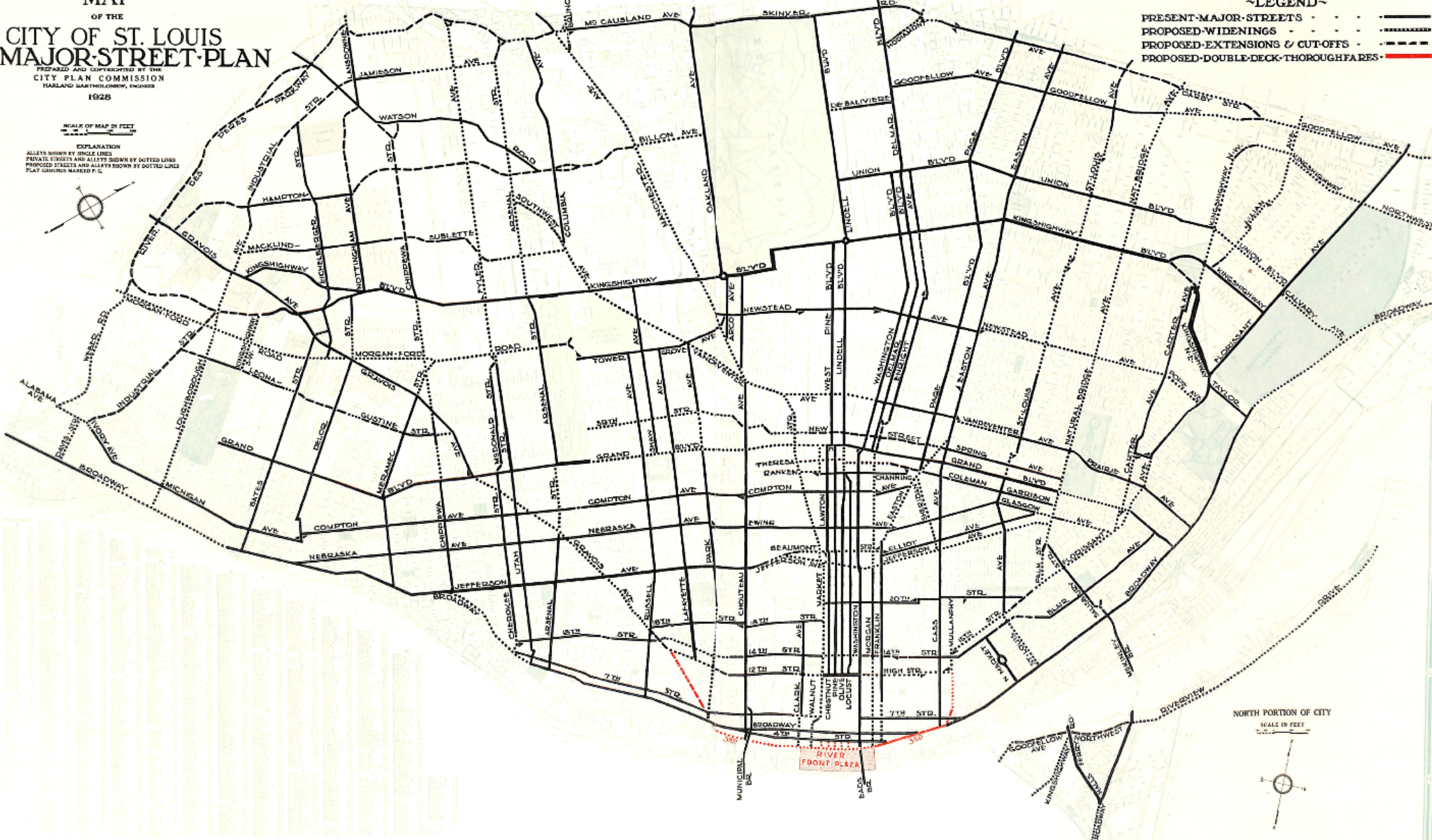
PREPARED AND COPYRIGHTED BY THE CITY PLAN COMMISSION
HARLAND WARTHOLLOMAY, ENGINEER
1925

SCALE OF MAP IN FEET

EXPLANATION
ALLEYS SHOWN BY SINGLE LINES
PRIVATE STREETS AND ALLEYS SHOWN BY DOTTED LINES
PROPOSED STREETS AND ALLEYS SHOWN BY DOTTED LINES
PLAY GROUNDS MARKED P. G.



~LEGEND~
PRESENT-MAJOR-STREETS - - - - -
PROPOSED-WIDENINGS - - - - -
PROPOSED-EXTENSIONS & CUT-OFFS - - - - -
PROPOSED-DOUBLE-DECK-THOROUGHFARES - - - - -



NORTH PORTION OF CITY
SCALE IN FEET
1" = 100'



for inter-communication between these widely separated parts of the City where through traffic movements are desired. (See Plate 12.)

The Free Bridge connection will permit of direct entry into the business district as well as an opportunity for by-passing the business district for traffic entering St. Louis over the Municipal Bridge and destined for points west and northwest on the several State Highways leading from St. Louis in these directions.

An appropriately designed traffic signal system will be required on the upper level roadway between Morgan Street and Clark Avenue, where grade connections are made with the several streets of the business district.

The Riverfront Plaza



ST. LOUIS has long desired the improvement of the central river front. It is impossible to deal adequately with this area without undertaking a plan which will fully comprehend all needs. The double-decking of Third Street and approach thoroughfares to the north and south, previously described, will introduce the large volume of traffic necessary to rehabilitate and enliven the eastern end of the business district. Adequate space for the parking of automobiles is a modern necessity, particularly where large volumes of traffic are to be brought to a business district as contemplated by the double-decked Third Street plan. A large section of the riverfront plaza is consequently made available for this purpose.

The narrowness of the streets and the excessive grades (see Plate 13) upon many of them between Third Street and the river in the entire central portion of the City, make it entirely unsuited for extensive commercial development. Furthermore, the very large number of obsolete buildings makes necessary comprehensive rehabilitation unless conditions are to be left unchanged. The double-decked Third Street would stimulate this entire area but of itself would not constitute anything like a complete solution of the problem confronting this area.

St. Louis has turned its back upon the river. There is a strong demand for making this entrance to the City a truly creditable front yard, as well as a place where St. Louis itself may go to see the Father of Waters amid pleasing surroundings. A river front drive is needed.

Area to be Acquired:

It is proposed to acquire all of the property between Spruce Street and Franklin Avenue and from Third Street to the river, a distance of thirteen blocks north and south and three blocks east and west. In addi-

tion to this, it is proposed to acquire the entire block between Third and Fourth Streets, Market and Chestnut Streets, and the eastern half of the block between Third, Fourth, Walnut and Elm Streets. (See Plate 14.) This area may seem to be unduly large, but numerous studies disclose that a lesser area would provide inadequate opportunity for comprehensive solution of the many problems here encountered.

This area provides numerous opportunities for variety of treatment and many years will be required for full development. Changing conditions may warrant considerable departure from the plans here proposed. The area is adequate in size, however, for the most full, complete and satisfactory solution of such problems as can now be anticipated, such as parking and garage space for automobiles, plaza and driveway, terminals for subway lines, and the like. (See Plate 15.) An interurban station is a possibility. Airplane landing space has been considered but is a doubtful possibility under present conditions and stage of development of the airplane.

The frontispiece of this report is a birdseye view of the river front plaza developed substantially as suggested in this description, drawn by Mr. Hugh Ferriss. It gives an excellent conception of the utilization of the river-front plaza and of the development of the eastern end of the business district, as visualized by the City Plan Commission, once the entire plan has been brought to full completion.

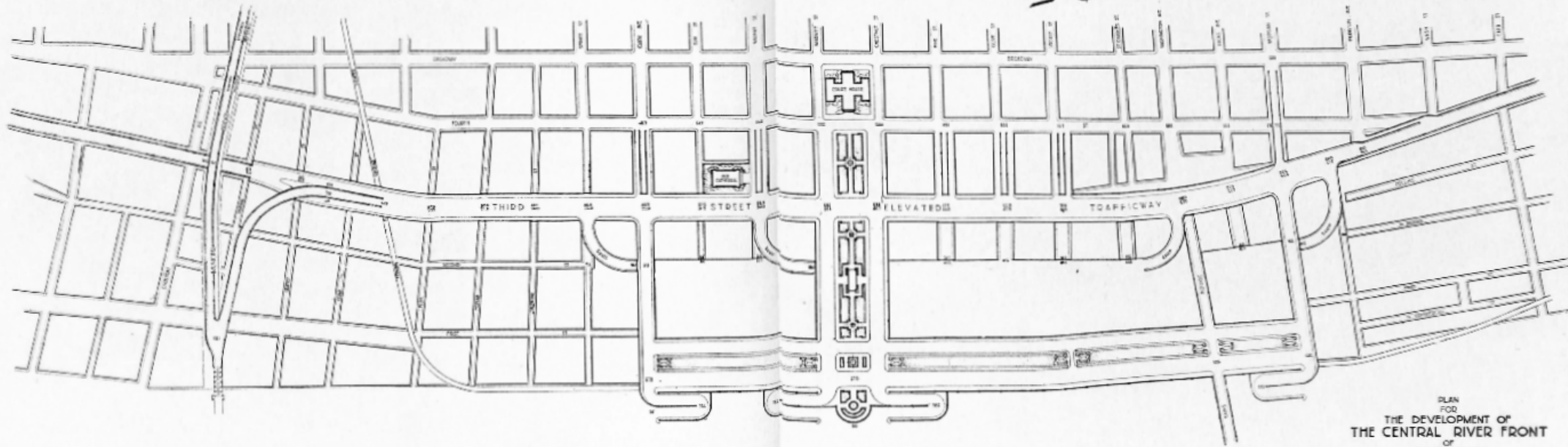
Mall and Driveway:

The Old Court House is considered to be one of the finest pieces of architecture west of the Mississippi River. It is rich in historic interest. It is a bond with the day when St. Louis found the Mississippi River its source of life and prosperity. It should again be tied in with the river front. It is consequently proposed to build a mall extending from the eastern end of the Old Court House upon a level grade to the river front. From the southern line of Market Street to the northern line of Chestnut Street is a distance of 350 feet, which would be the width of this mall from the

Court House to the river. It would be four blocks long—a distance of approximately 1,400 feet. There would be wide roadways on approximately the present lines of Chestnut and Market Streets, with a panel of grass between. At the eastern terminus of the mall could be a memorial of surpassing beauty on axis with the Court House to the west and sixty feet above the top of the levee. This memorial could well be dedicated to the founders of the City who first landed practically at this point. On either side of this monumental memorial, roadways would lead down to the levee with a maximum grade of 10 per cent. Here an attractive boat landing could be created.

It is proposed to extend the mall and driveway parallel to the river front both north and south. It would be approximately 270 feet wide and approximately 60 feet above the top of the levee. Its east line would be parallel and co-incident with the present east line of the elevated railroad of the Terminal Railroad Association, which tracks are now twenty-four feet above the top of the levee. To the south the driveway would terminate at Clark Avenue, where a connection westward would be made to the upper level of Third Street. There would also be opportunity for a ramp leading to the levee. To the north the mall and driveway would be extended as far as Morgan Street, with a connection west to the upper level of Third Street and with a ramp connection to the levee. This mall and driveway would intersect the upper level of the Eads Bridge at present grade, thus in no way disturbing this beautiful structure. The total length of the mall and driveway paralleling the river front is 3,400 feet.

Beneath this mall and driveway, leading eastward from the Old Court House, and paralleling the river front, would be ample space for terminals and looping of subway lines, as well as for the present elevated railroad (shown through the arches in Mr. Ferriss' drawing), and possibly for some warehousing and storage facilities incident to river traffic and use of the levee. It is estimated that all of the land, i. e., 40½ blocks, should be acquired and that, at least, the central mall and driveway from the Old

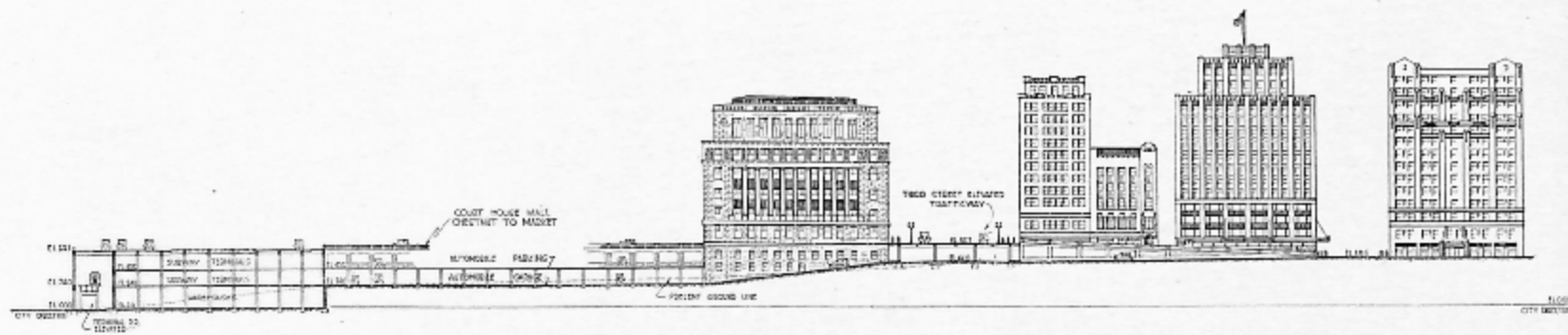


PLAN
 FOR
 THE DEVELOPMENT OF
 THE CENTRAL RIVER FRONT
 OF
 SAINT LOUIS
 CITY PLAN COMMISSION - 1921
 SCALE - 1" = 100'

WHARF

THIRD STREET

FOURTH STREET



SECTION OF PLAZA
CENTRAL RIVER FRONT DEVELOPMENT

FOR
SAINT LOUIS

CITY PLAN COMMISSION—HARLAND BARTHOLOMEW, ENGR.

SCALE 1/8" = 1'-0" EQUALS 20 FEET

50 100 150 200

PLATE 15

Here is shown the respective elevations of the business district, the two levels of Third Street, the two level garage, the high-level riverfront driveway, Terminal elevated and future subway loops and the levee.

Court House to the river should be constructed as part of the first stage of development. The construction of the mall and driveway paralleling the river front could be left to a later date. It is proposed to preserve the Old Cathedral, so long associated with this section of the City and still actively used, by moving it from the north side of Walnut Street between Second and Third Streets to the eastern half of the block bounded by Third, Fourth, Walnut and Elm Streets. (See Frontispiece.)

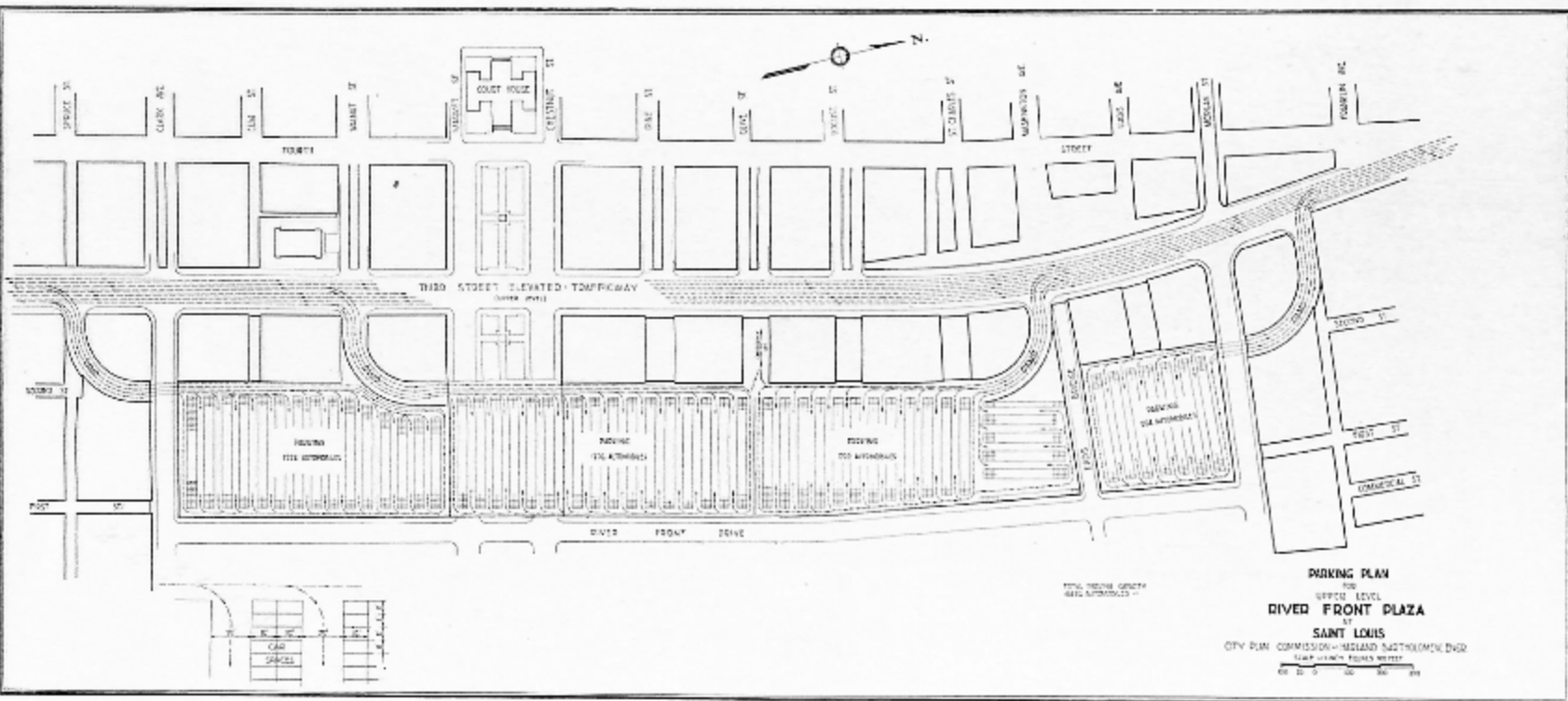
Parking and Garage Space:

Upon completion of condemnation proceedings, the property in the riverfront plaza should be razed and used for open-air garage space. This would be possible with very little change in the grades of the present ground levels. (See Plate 16.) Subsequently, with the construction of the upper level mall and driveways, subway terminals and loops, and as increased demand for parking space occurs, a one-story garage so constructed as to permit parking upon the roof, should be erected in the area between Third Street and First Street. If, through use of the power of excess condemnation, the property between Second and Third Streets were devoted to private use, the area between First and Second Streets would alone permit of accommodation of more than 8,000 automobiles in a double level garage. To accommodate such a vast number of cars it would be necessary to distribute entrances in such a way as to prevent congestion, and at the same time permit of easy access to both the lower and upper levels of Third Street. For this purpose ramps are shown leading from the upper level of Third Street down to the parking area in the vicinity of Spruce and Walnut Streets on the south, and Washington and Franklin Avenues on the north. Other entrances are provided at Pine, Olive, and Locust Streets, and Lucas Avenue. Plates 17 and 18 illustrate the scheme of parking arrangement and traffic movement in and out of the garage spaces to the high level of Third Street and to the various streets of the business district at present grade.

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PARKING PLAN
 FOR
SECOND LEVEL
DIVED FRONT PLAZA
 ST.
SANT LOUIS
 CITY PLAN COMMISSION - MIDLAND SUBDIVISION, DIVD
 SCALE - 1/4" = 10' FEET
 0 20 40 60 80 100

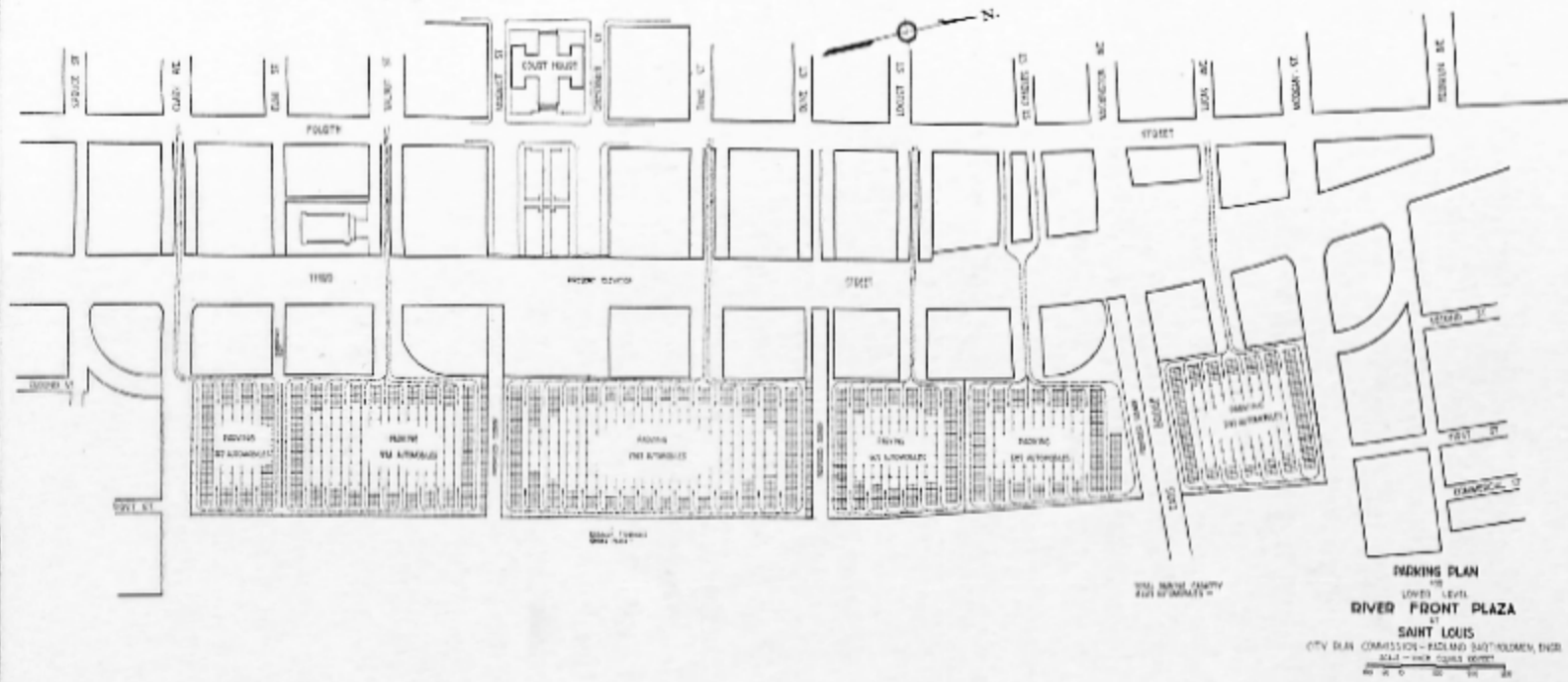


PLATE 18

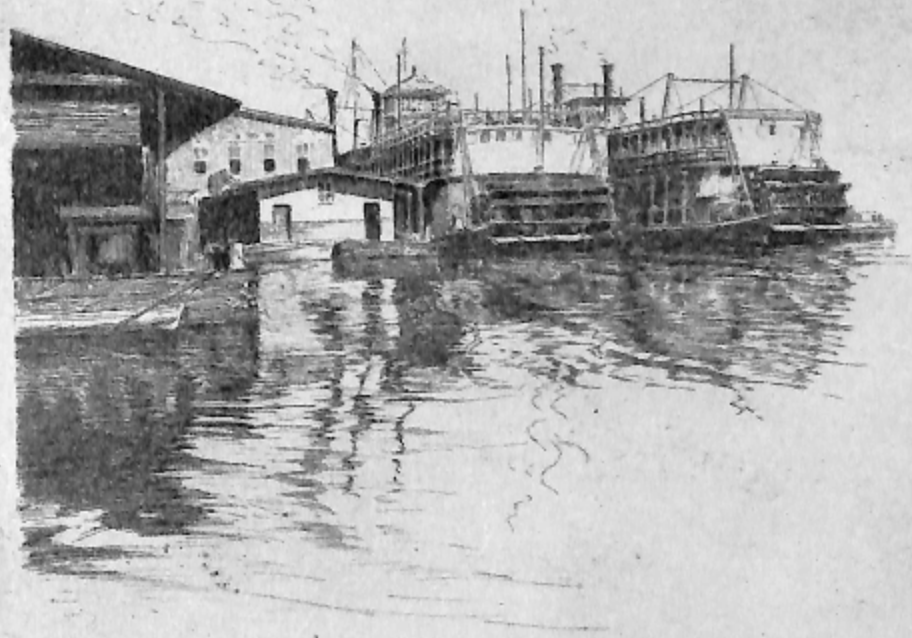
Traffic entering and leaving the lower-level parking areas, does not conflict with movements in and out of the upper-level. (Shown on the preceding page)

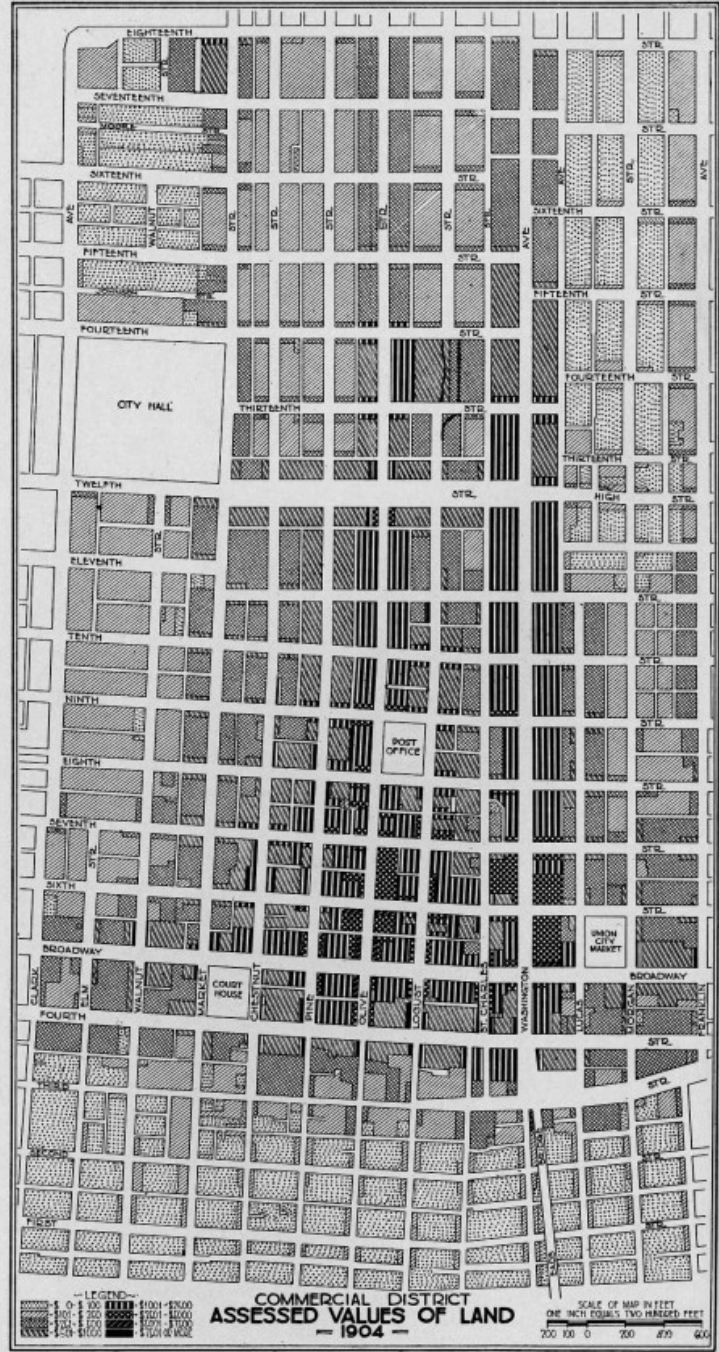
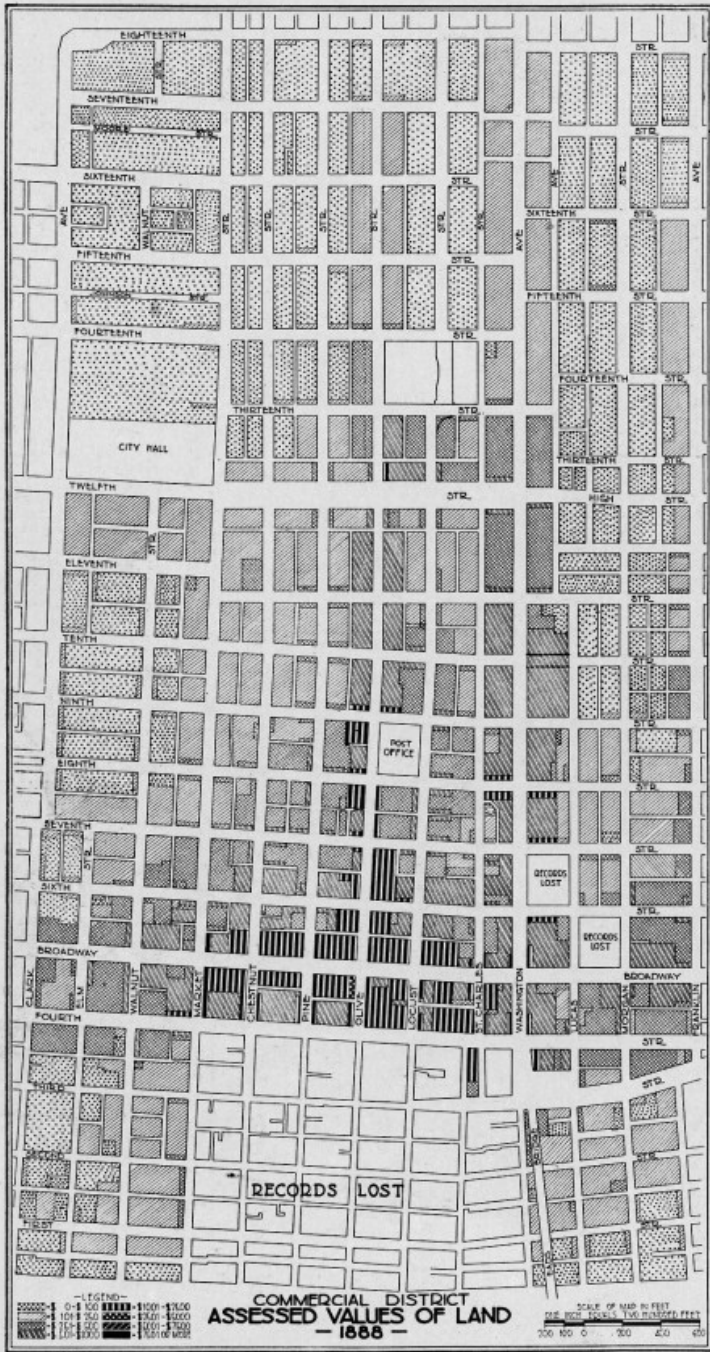
Procedure



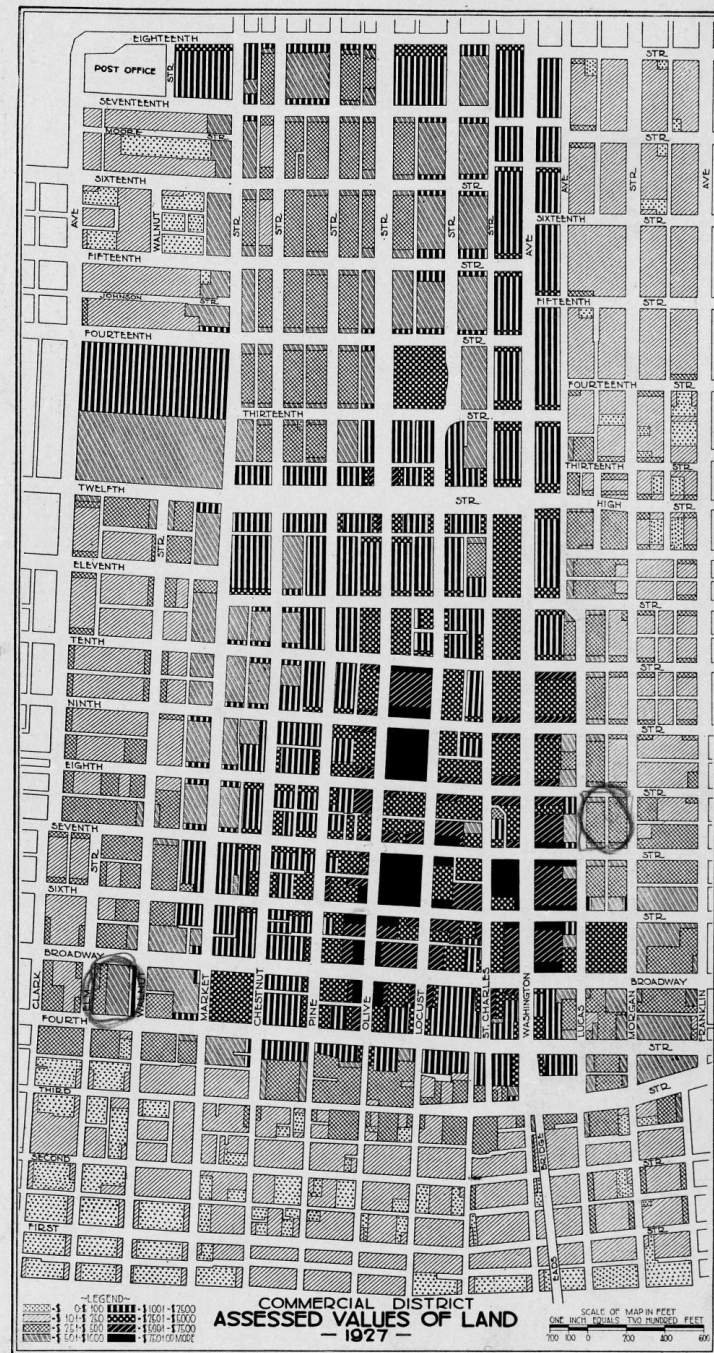
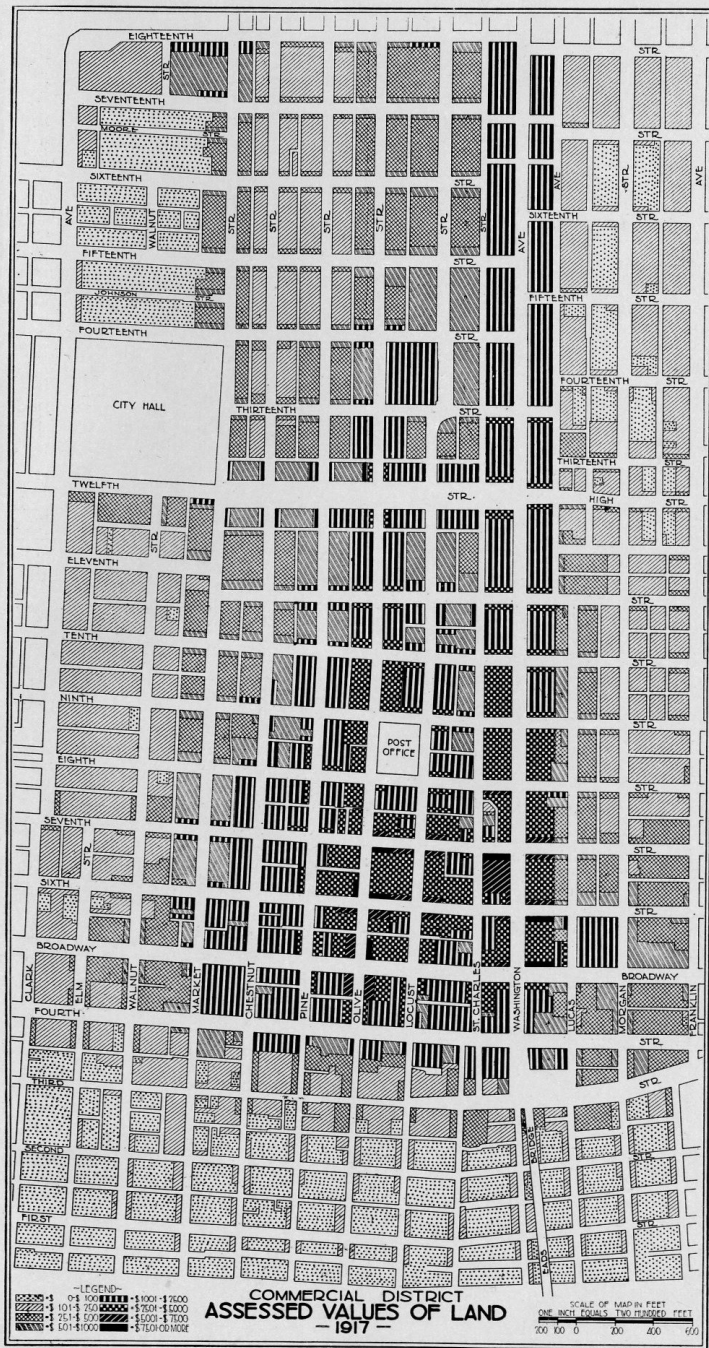
THE acquisition of the right-of-way and the double-decking of Third Street and its approaches, and the riverfront plaza are one integral scheme. They are mutually interdependent and should be simultaneously undertaken. Present powers of the City permit the acquisition of property for streets, highways, parks and parkways, and for the levy of assessment of benefit for property so acquired. This entire plan could be carried out under existing procedure, although considerable inequity might result. Present legislative authority does not permit of the levy of benefit assessment for the cost of structures. This authority should be secured in the form of a legislative enactment at the next session of the Missouri Legislature.

In an undertaking of the magnitude here proposed, private properties do not readily and quickly readjust themselves. In Paris, London, and other European cities, condemnation of additional land beyond that actually needed for given improvement has often been resorted to, and the extra land not needed for the improvement leased or resold under certain conditions so as to insure its development in a manner commensurate with the character of the improvement. This procedure is known as Excess Condemnation. Fourteen states in this country have granted such authority to their cities. If such authority were secured in Missouri through amendment of the State Constitution, it would be decidedly helpful in the execution of this plan. With this authority a tier of blocks between Second Street and the new Third Street, and at the north and south extremities of the riverfront plaza could be disposed of by lease or sale with appropriate safeguards as to architectural design and construction, and with material lessening of the cost of the entire project





PL
Changes in property value in the Central Business District
illustrated by these charts showing the assessed values
during the last forty years. While the total assessed value
from Fourth Street east has



E 1

istrict. The westward trend of property values is well
value of property (per front foot) at intervals
value has increased considerably, the district
remained almost stationary.