

extension of the West River Road and the Stone Arch Bridge, and end at the existing viewing station of the Upper St. Anthony Lock and Dam. Here pedestrians or bicyclists would discover river edge pathways leading to the Gateway promenade upriver, or downriver along a natural edge path to Cedar-Riverside and beyond.

The other half of Riverfront East, farther downriver, is partially bounded by grain elevators on one side and by I-35W on the other. Connected to the river's edge by a pedestrian bridge passing over West River Road from the bluff, high-rise housing is illustratively shown as bordering curving land forms which could bring river park atmosphere into the residential area. Other physically integrated housing might step down the slopes of the contoured land forms, offering the maximum breadth of scenic views to residents. Activity plazas could connect high-rise towers—providing room for children to play and adults to stroll, sit, and intermingle.

Between the two sections of housing a commercial-social service center to serve the total neighborhood might be nestled beneath the fluted forms of the large grain elevators. Climate-controlled pedestrianways for residents might be developed underground.

The community center would include such establishments as a supermarket, drugstore, florist, liquor store, cafeteria, bakery, post office, bank, day care center, health care, indoor and outdoor recreational facilities—swimming pool, tennis courts, craft center, etc. The center could be scaled to serve both neighborhood residents and employees of firms throughout the Industry Square area.

Riverfront East should be buffered from industry across Washington Avenue by widening the avenue into a divided, tree-lined boulevard.

Vehicular access to this residential area as a whole might be gained from Portland Avenue and from 9th, 11th, and 12th Avenues S. These routes should not accommodate through-traffic within the residential area, but should be designed only to lead to parking facilities for residents.

## Upper River

The North Riverfront can now provide excellent sites for indus-

tries requiring river access, especially those for whom proximity to an urban center is a major cost factor. Although vacant and under utilized land exists in the area, resources for industrial development are available—shoreline, city water and sewage systems, adjoining railroads and truck routes.

**Two west bank districts along the Upper River are presently under development: the North Washington Industrial Center, on either side of West Broadway; and the Municipal Terminal, between Lowry Avenue and the Camden Bridge. Further consolidation of some existing industry and related uses, with an expansion of new industry, is the objective. Industry which has a demonstrated need for direct river access should be given top priority to the river edge locations. And industries able to relate employment opportunities to the needs of North Side residents should be given high priority.**

**Industrial development on both banks should be oriented, however, to structurally enclosed**

**manufacturing and warehousing systems—should be set back from both roadway and river—should create adequate off-street parking for employees and visitors and off-street loading—should be carefully monitored for air, water and noise pollution—and should use only advertising signs which illustrate the company title and and the nature of its business.**

On the west bank, the proposed I-94 freeway route will clearly divide industrial uses from residential areas farther inland. Pedestrian greenway windows should connect these residential activity areas to the Riverfront. Where possible, river edge pathways screened when necessary by fences and/or planting should connect with the greenways. This should occur wherever the river is not used directly for barging activities. A pedestrian-bicycle route along the freeway right-of-way might also be connected to the greenways, particularly around the Municipal Terminal where public open space development is not desirable.

On the east bank, mixed industrial and residential development borders the river from Broadway north to the Northern States Power-Riverside coal-burning steam power plant. Residential

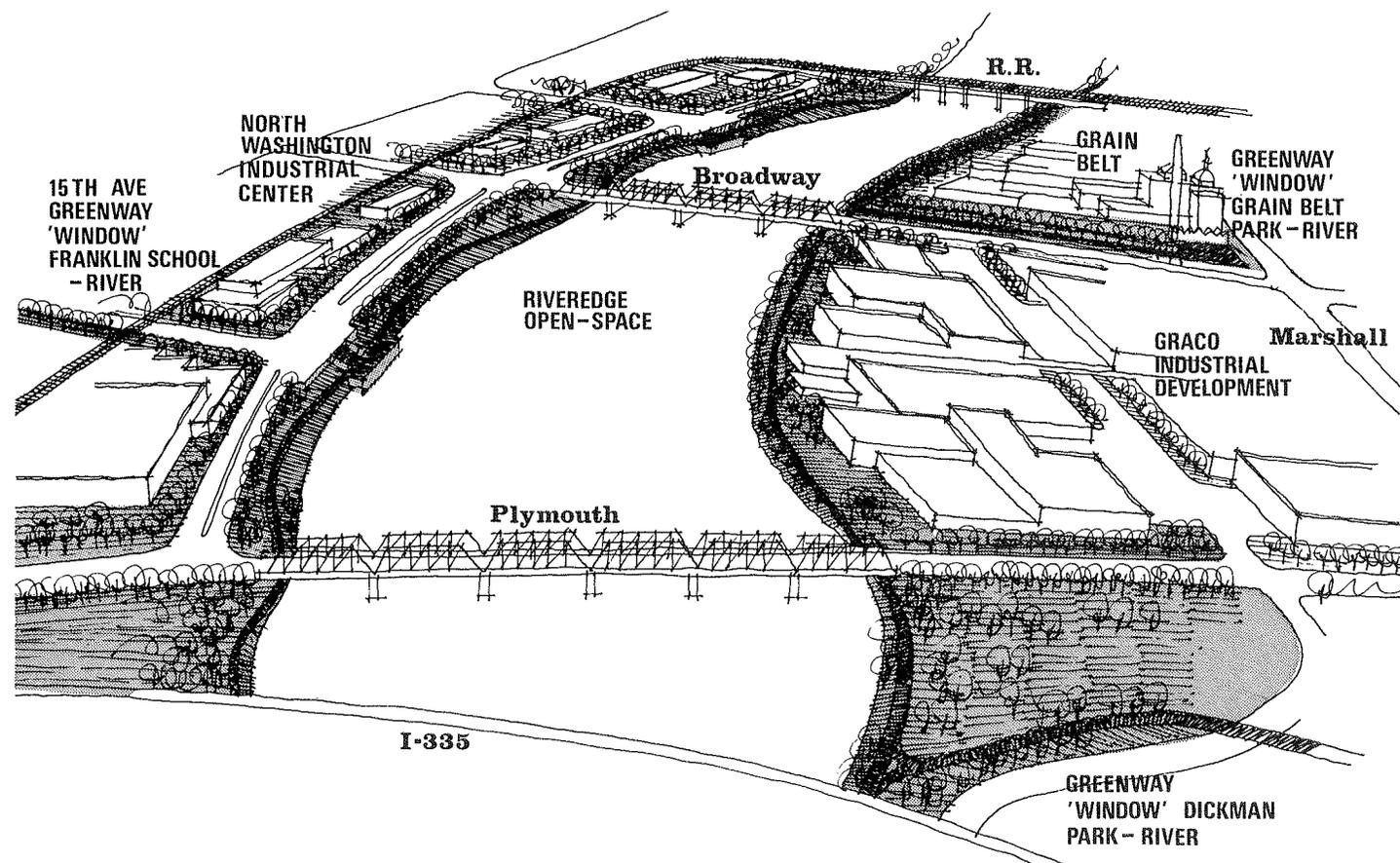
use is generally proposed south of the NSP plant, and new industry north of the plant. Aside from this, planning on the Upper East Bank focuses primarily on encouraging well-designed development, including the elimination of parking along the river, the provision of pedestrian and bicycle pathways where possible along the banks, and the development of windows to residential and park areas farther inland.

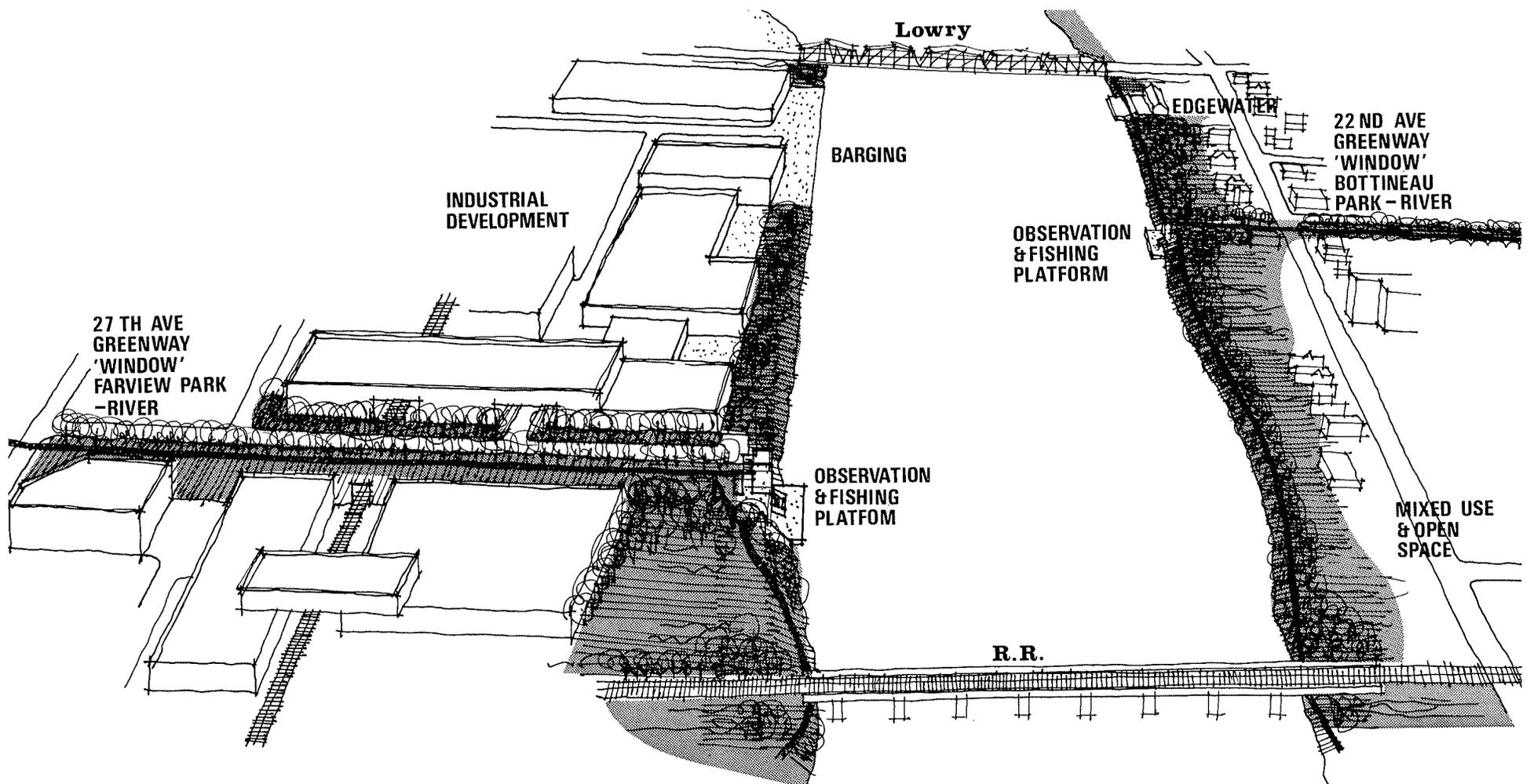
The Camden-Webber Parkway area through which Shingle Creek flows to the river, offers potential for both greenway development and for broader open space park development along the bank.

The primary visual landmarks on the Upper River include the six bridges crossing the Mississippi and the Grain Belt Brewery buildings by the Broadway Bridge. As motorists approach the bridges, consistent signing and landscaping treatment should identify the roadways as vehicular gateways to the river. A greenway window should lead from the river edge to Grain Belt Park.

**A definite policy prohibiting landfill operations along the river from using material other than dredged-up spoilage must be established. Sedimentation in**

Illustrated proposal, I-335 Bridge to the Burlington Northern Railroad Bridge.





Illustrated proposal, Burlington Northern Railroad Bridge to the Lowry Avenue Bridge.

the Upper River calls for continuous dredging. Once space is no longer available for dumping the spoilage, it will have to be barged downstream or trucked away. Clearly, additional filling-in of the river edge must be restricted to that which results from the U.S. Army Corps of Engineers dredging operations in order to postpone transportation of the spoilage in the future. On the other hand, industries developing along the river should be able to recontour the river bank using spoilage, or, if necessary, cutting out a portion of one part of their bank to fill in another.

## WEST BANK

**NORTH WASHINGTON.** The North Washington Industrial District, part of the North Washington Urban Renewal area, extends from Plymouth Avenue on the south to Lowry Avenue on the north. Its west boundary is the programmed location of I-94.

Once the heart of a great lumbering industry, this district has since remained predominantly industrial. Railroads have played a key role in the growth of a variety of industrial uses. The district functions well for both manufacturing and cargo transfer activities. Access to and use of the river for industrial purposes is more easily obtainable here than in most other Riverfront areas, due to lower banks and relatively unimpeded access. Completion of I-94 will provide excellent access for trucking operations.

**Though North Washington contains a significant amount of warehousing and storage—particularly outdoor storage—at present, redevelopment plans should be strongly oriented toward increased manufacturing and processing and decreased low-intensity uses in order to raise employment opportunities in the area. All residential use should be removed from this district.**

Considerable commercial land use exists in the area in addition to the in-

dustrial. The degree to which these uses are allowed to remain or rebuild may vary under redevelopment. There may, on the one hand, be some commercial activities of the type classified as non-intensive, such as lumber yards and automotive parts suppliers. Such uses should, however, be subordinate to higher employment uses, limited to those which would directly serve nearby uses and employees working in the area. These should be consolidated into one or two small centers rather than being spread throughout the area.

Junk yards and salvage and scrap operations predominate in the southern one-half of the area. Their present image is less than desirable, but the service they provide in salvaging and recycling solid waste is vital to the City.

Scrap processors and shippers should be more highly consolidated than at present. All operations of less than three acres should be required to be entirely within enclosed buildings. And those operations which are greater than three acres in size should be completely screened from view. Noise levels emanating from industrial operations

should meet the standards applicable to the area in which they are located.

A large segment of the immediate river edge of the district is being developed in new industry of a non-river related type—North Washington Industrial Center. Though this will aid greatly in upgrading the character of the area and increasing job opportunities, the highest priority for further industrial development on the immediate river bank should be given to uses which have specific river needs.

Non-industrial traffic should be discouraged from using the streets in the area, including Washington Avenue. North-south automobile traffic should instead be encouraged to follow I-94, once it's constructed, or Lyndale Avenue N. Trucks, on the other hand, should be discouraged from entering the residential area west of I-94.

A number of the shorter, local collector streets should be eliminated, particularly some of those running east and west, thus making more land available for development and creating a smoother traffic flow. On-street parking

and loading serving industries in North Washington should be eliminated and replaced with off-street parking and loading facilities.

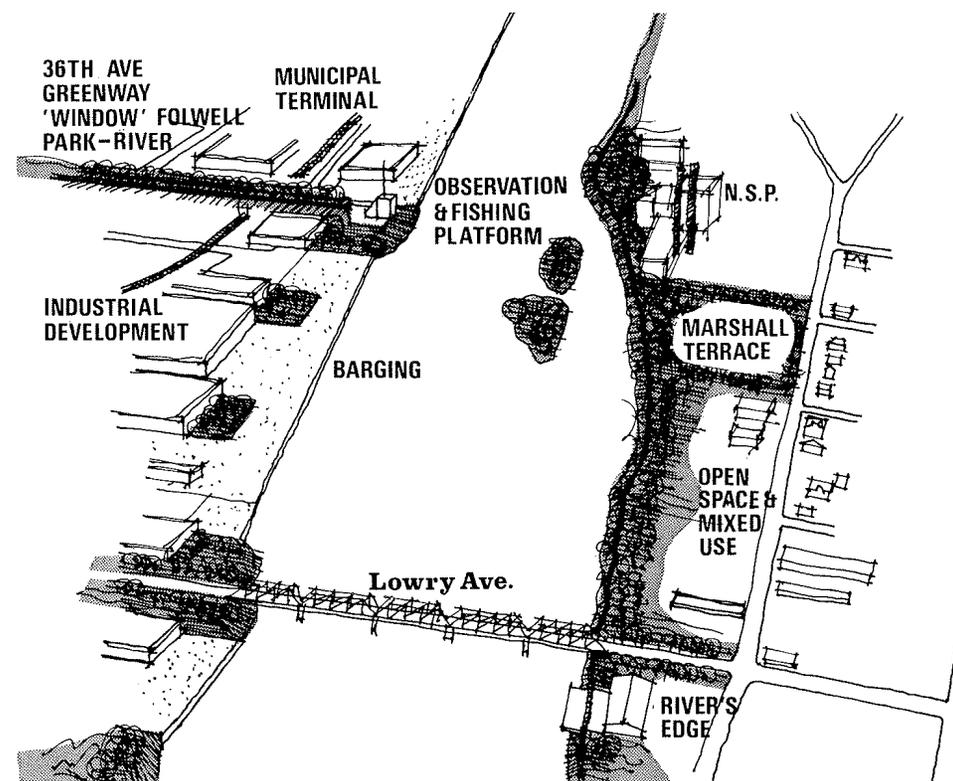
Where industrial use of the river is not needed, a greenway for pedestrians and cyclists should be continued along the river edge, at least from the Plymouth Avenue Bridge to the 27th Street N. window. If the river edge cannot be connected to the greenway system due to intervening barge loading, it should still be well landscaped to serve as a green screen, shielding any less than aesthetically pleasing uses from public uses on the river or the opposite bank.

At least two greenway windows should connect the Riverfront to activity spaces within residential areas; one along 17th Avenue N. to the Hall School complex, and another along 27th Avenue N. to Farview Park. Although the greenways along the river in this district will not experience a magnitude of pedestrian use equal to that which will occur in the Central area, they should, nevertheless, be designed to accommodate fishing piers, small picnic areas, and pedestrian and bicycle paths. As in other areas along the river, a minimum horizontal width of 75' should be maintained in order to adequately accommodate these uses.

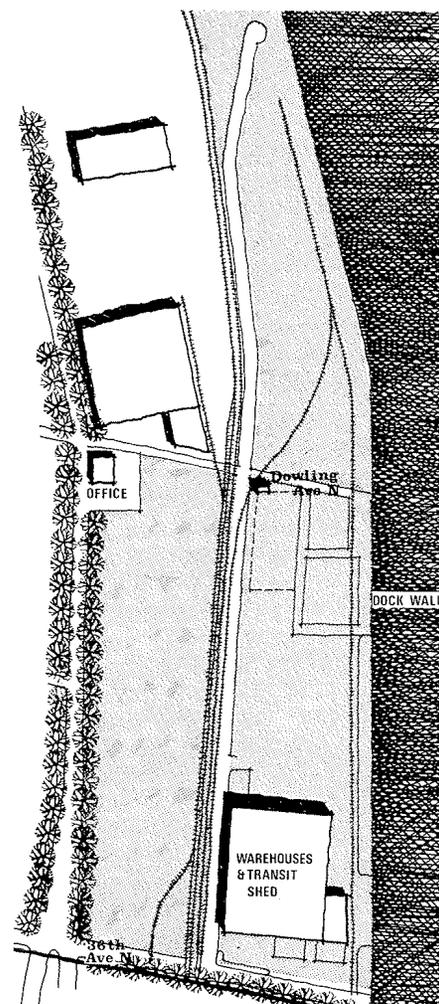
**MUNICIPAL TERMINAL.** The recently constructed Municipal Barge Terminal dominates this west bank district extending from Lowry Avenue N. to the Soo Line Bridge.

Since the completion of the Upper Harbor project with the construction of the St. Anthony Locks, the use of barge transportation to ship materials and products has continually increased. The Municipal Terminal, operated under City contract by the Northern Waterways Terminal Corporation, services industries which do not deal in large enough quantities to construct their own facilities, as well as industries situated away from the river which can receive advantageous rates by using barge transportation.

During its first year of operation, 1970, the new terminal handled 34,000 tons of shipped materials. Substantial bulk product shipments were still being handled at the old Washington Avenue Terminal. Estimates state that the total will reach 400,000 tons in 1972 through the further relocation of



2. Illustrated proposal, Lowry Avenue Bridge to the Municipal Terminal.



3. Upper Harbor Municipal Terminal.

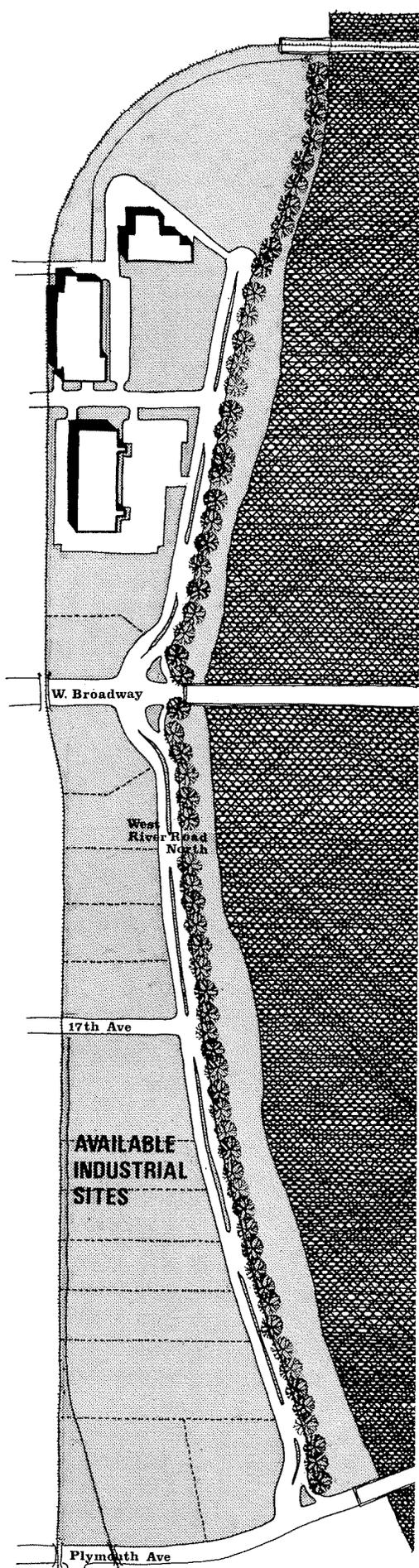
activity from the old terminal as well as increased growth in the water transport of goods.

Other industrial activities are located in the district in addition to the terminal. Opportunities for additional industrial expansion will become available when I-94 is constructed, and when the few remaining residential lots in the district are removed.

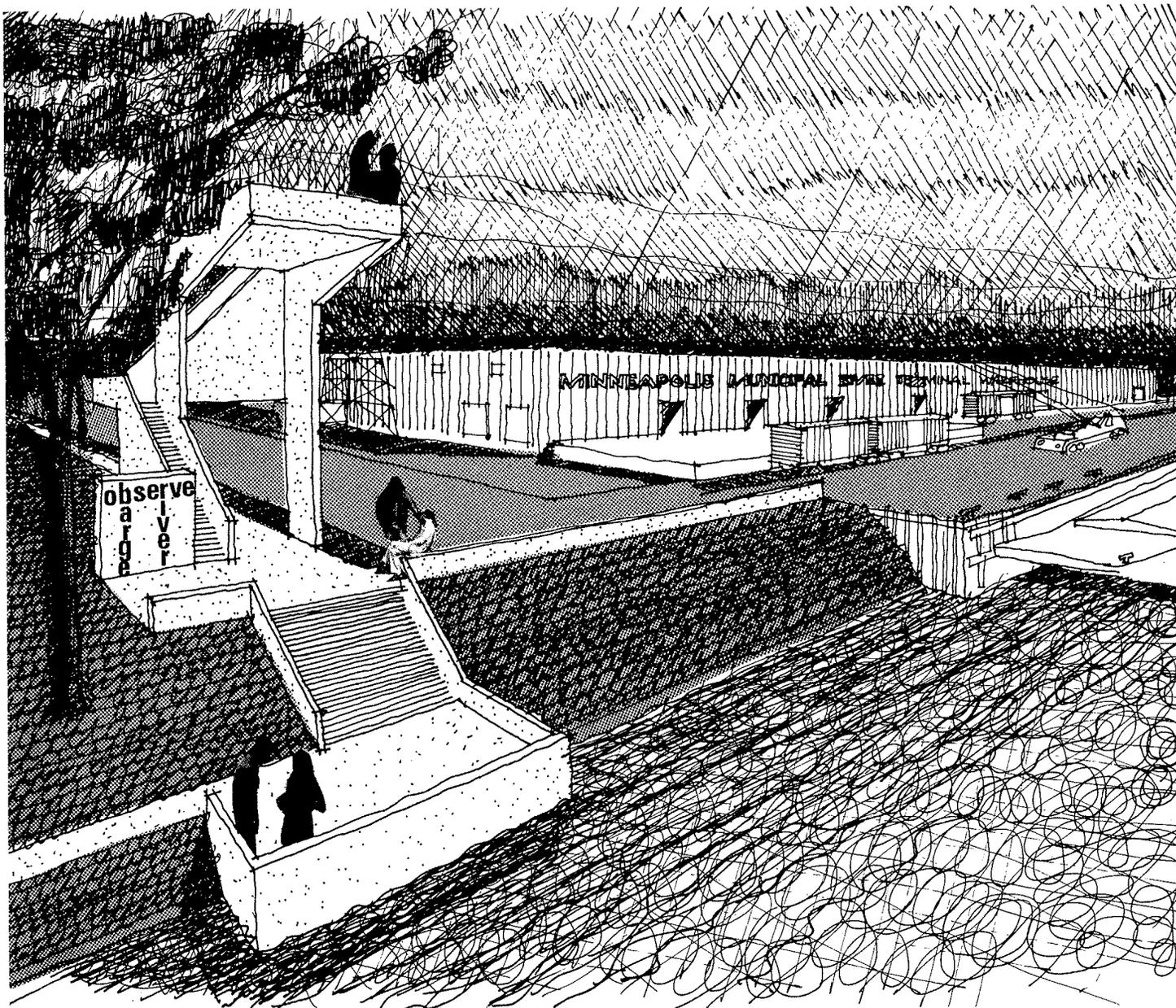
Some of the land area, particularly between 2nd Street and Washington Avenue N., is quite narrow and difficult to utilize. A careful redesigning of the street pattern can alleviate the problem of small sites created by this situation.

The river edge of the district where barges are being loaded should be regarded as a work area in which public pedestrian activity would constitute both an interference and a potential personal safety hazard. Safeguards should be developed to prohibit pedestrian movement from this segment of river banks.

An observation area or platform, however, should be planned where visitors can observe, either from a vehicle or on foot, the loading and unloading of barges. Pedestrian access to such a facility might be gained from 36th Avenue N., which leads inland to Folwell Park. To en-



1. North Washington Industrial Center.



On and off-water industrial activities would attract visitors to an Upper Harbor observation tower.

hance the industry's image to visitors, cranes and barge tows might be painted in bright colors, and schedules might be posted for the arrival and unloading of barges. Some of the barge tows have already begun to present this kind of colorful image.

A pedestrian and bicycle pathway along I-94 from the 27th Avenue N. window to Shingle Creek would provide a necessary link in maintaining an interrupted linear pedestrian system where there can be no river path.

The river banks in the Municipal Terminal district should be planted to screen unsightly uses wherever the river is not being directly used. There should be no industrial back yards on the river

edge. This prohibition would include unsightly stockpiling as well as unscreened automobile parking or truckloading along the banks of the river.

## EAST BANK

**EAST BROADWAY.** Between the Plymouth Avenue Bridge (8th Avenue N.E.) and the Burlington Northern Railroad Bridge (16th Avenue N.E.) land use is primarily industrial, with several small spots of commercial activity.

The Riverfront plan would support industrial development here in line with its major concept of Upper River use. With few ex-

ceptions, therefore, the river side of Marshall Street should be reinforced as an industrial area, and everything to the east of Marshall should be residential. Marshall Street serves as a primary truck route to the north and should continue as such.

Since there are now few users of the river in this area, it is feasible to extend the river greenway and pathway system along most, if not all, of the river banks in this district. In the few places where the river is used directly for barge loading, the bicycle and walking pathways should be designed to go around or through the uses.

The river edge pathways should also be connected to residential areas by a

greenway window along Broadway Street N.E. The Grain Belt park area would thus be tied to the river, creating a window with a unique image.

**MARSHALL TERRACE.** The Marshall Terrace district can be characterized by its narrow Riverfront, separated by the busy truck route of Marshall Street from the inland portion of the district. The segment stretches from the Burlington Northern railroad bridge to the north end of Marshall Terrace Park, bordering the Northern States Power plant.

The area is also distinctive in its extreme mixture of existing uses. Random and uncoordinated combinations of single and multiple residences and commerce and industry appear along the river. East of Marshall Street a section of single-family housing covers much of the length of the district. Farther east a strip of industry borders the Burlington Northern tracks. These industrial uses follow the railroad to the river, crossing the southern end of the district. On the corner of the two arterials, Marshall Street and Lowry Avenue, there are several commercial establishments.

The task of future development of this district is to maintain the integrity of four district sub-areas. The river strip west of Marshall Street should be used only for a combination of medium density housing and open space. Commercial uses south of the Marshall Street and Lowry Avenue intersection may be further intensified as the only commercial node serving the district. The single-family housing and railroad-edge industry should be mutually protected from encroachment.

River edge property owners in this district may be encouraged through an incentive program to allow public use of a pathway in front of their buildings at the top of the bluff. No further use for auto parking should be allowed on the river side of any east bank building.

The extension of a public access greenway along the entire river edge of this district to Marshall Terrace Park is an important, if difficult, task. A pedestrian greenway window might connect the river path to Bottineau Field, an active recreation area, along 2nd Street N.E. Even if rights to establish a continuous river pathway cannot immediately be obtained, the greenway might end at a fishing and observation pier developed for neighborhood use.

**NORTHERN STATES POWER.** The Northern States Power Riverside plant extends from Marshall Terrace park to St. Anthony Boulevard. The area includes a large fenced-in expanse of open coal storage on the river's edge.

**If the plant is converted to natural gas or otherwise undergoes changes reducing its need for part of the present site, industry, and in particular, barge related uses, should receive top priority for this Riverfront location. In the near future, however, parts of the river edge fronting Northern States Power might be developed for hiking and bicycle paths.**

The land stretching from Marshall Street east to the Burlington Northern tracks is presently divided in use between industry and single-family housing. Though housing should be maintained, industrial use might be somewhat intensified, since the district is so well served by rail facilities and trucking access.

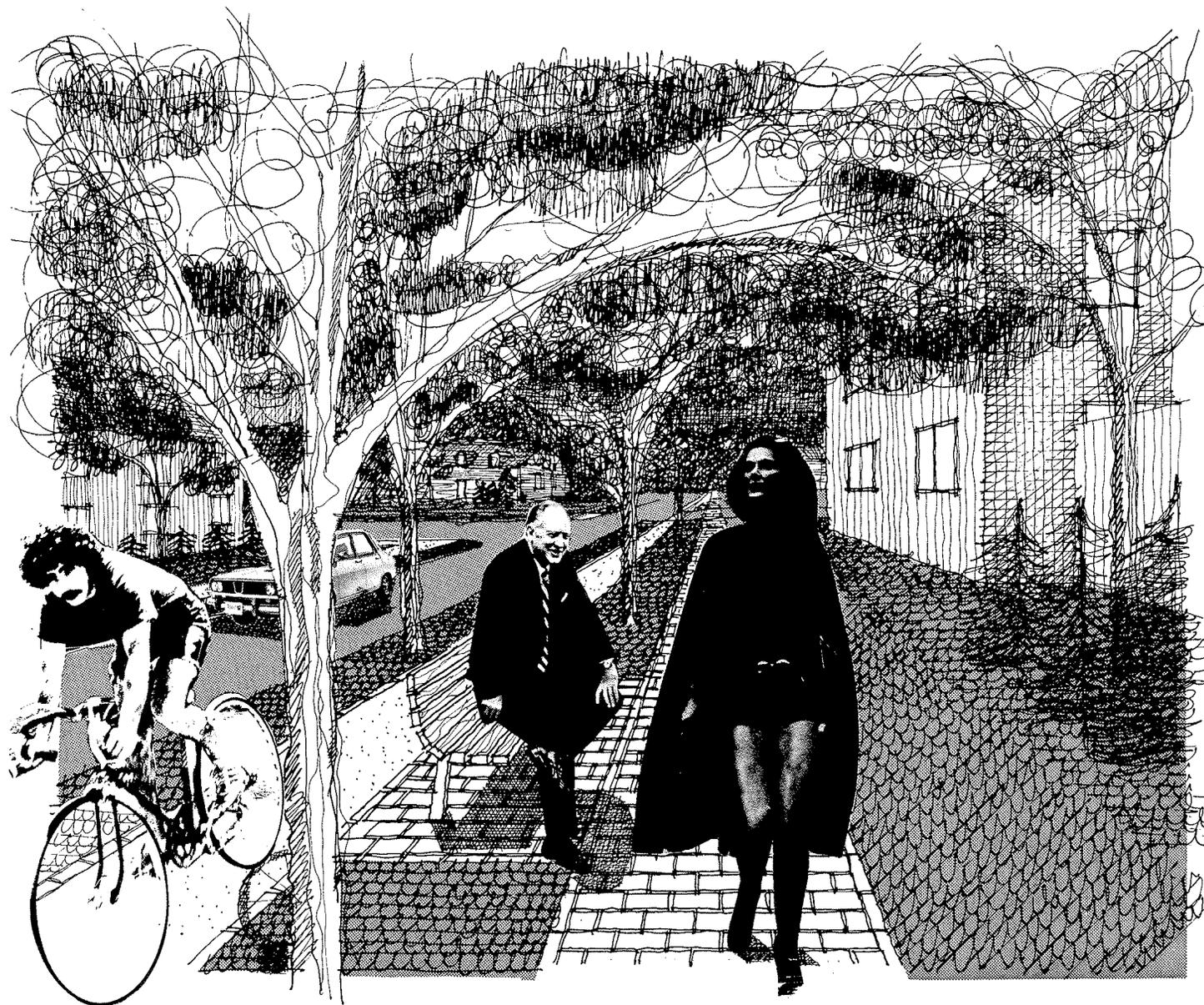
North of the NSP-Riverside plant is a short stretch of the St. Anthony Boulevard parkway. This narrow strip leads to the existing Camden Bridge approach. Little improvement in this section is needed aside from finding ways to extend hiking trails under the bridges and on north to connect with larger regional open spaces.

## CAMDEN

**Land use patterns in the Camden district are likely to be substantially altered in the near future with the construction of I-94 and a new Camden Bridge. Full advantage of the process of change must be taken in this northernmost district of the Riverfront study area to maximize the public open space potential of Shingle Creek, to improve accessibility to natural Riverfront space, and to facilitate the healthy growth of Camden residential and commercial activity.**

The Camden Riverfront on the west side of the Mississippi extends north to the City limits from the Soo Line Bridge and west to proposed I-94. The district is presently composed of a variety of land uses and activities, few of which bear well-developed relationships to each other or to the Mississippi River.

Transportation facilities dissect the area, particularly near the west end of



Pedestrian windows should incorporate unified, yet creative design in lighting, landscaping, outdoor furniture, and separated pathways.

the Camden Bridge, in such a way as to seriously disrupt the integrity of the commercial center. And strip commercial-industrial development has occurred along North Mississippi Drive north of Webber Park with resulting unlimited curb cuts, traffic congestion, and general unattractiveness. At the northernmost limits of the district a deteriorating low-income housing project, North Mississippi Court, occupies Riverfront space which has been subject to intermittent flooding.

Many aspects of the land use pattern including considerable opportunities for change will exist upon the completion of I-94 through the area. This link will make the Downtown and all other parts of the City and metropolitan area much more accessible and will reduce traffic on North Mississippi Drive.

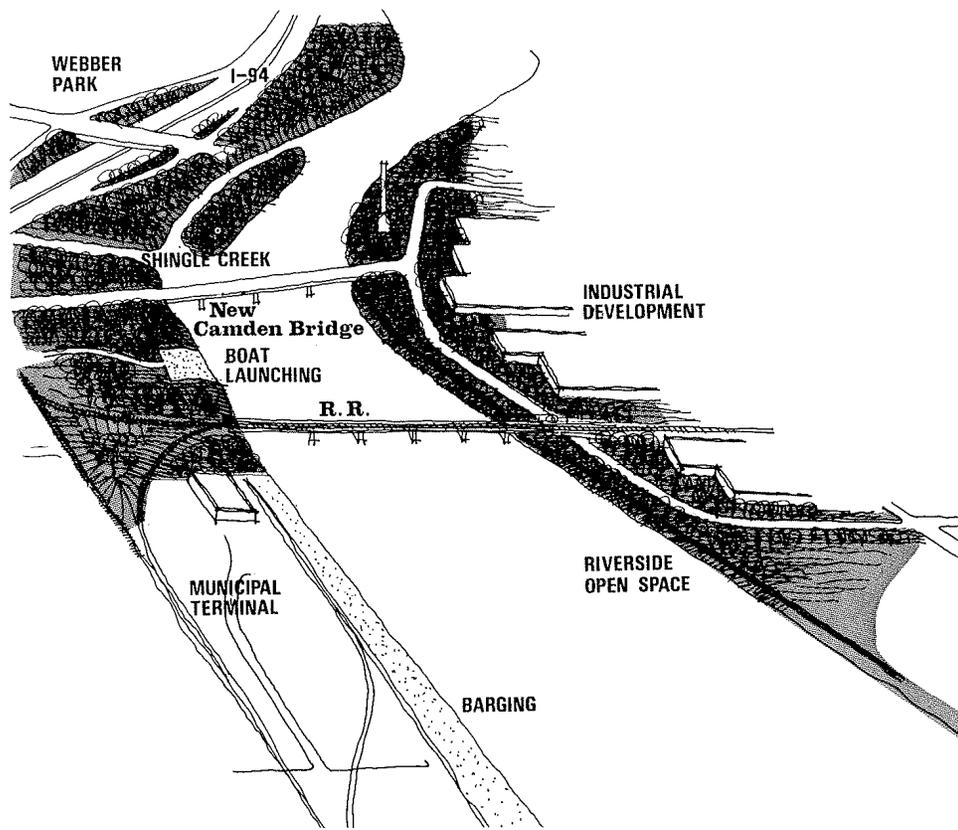
Closely related also to future development in the Camden area is the location of a new Camden Bridge. This bridge is in deplorable condition and must be replaced soon if movement between the west and east banks is to continue. Present plans are to locate a new bridge near the existing one. While the completion of I-94 in itself will reduce through traffic in the Camden commercial center, other means as well should be sought to alleviate unnecessary vehicular congestion.

**Regardless of the precise bridge and freeway locations, the Riverfront plan calls for maintenance of the river bank throughout the length of the Camden district as natural, passive open space. The curving bank should provide opportu-**

**nity for community residents to picnic, stroll, and ride bicycles or horses along natural pathways.**

Because the 9-foot Mississippi channel is maintained only to the Soo Line Bridge, the Camden segment of the river offers potential for fishing and canoeing, but not for river-oriented industrial use. The existing boat launching ramp should be maintained with adequate access and with sufficient parking screened from view. As the opportunities for improving fishing in the river are further explored, special facilities or the natural banks may be developed to encourage this activity.

Neither formal contouring nor high-order landscaping need be considered for this district's river banks. They



Illustrated proposal, Camden Bridge area.

should not be oriented toward extremely high use, but should function more as a passive community access to the river, and as an introduction to more natural-type of Riverfront open space preserve north of the City.

A pedestrian window just south of North Mississippi Court should connect the Riverfront to inland residential areas and to Bohanon Field. The greenway might go under I-94 and across North Mississippi Drive, in the vicinity of 50th Avenue N.

A greenway should also follow Shingle Creek west and north to where it crosses the City limits. Adequate room for a pedestrian pathway should be created under North Mississippi Drive and I-94 along the creek's edge to provide a pedestrian connection between the river edge and Webber Park. As much of the creek's natural, rugged character as possible should be maintained.

**The improved access that I-94 will provide should enhance the opportunity for some higher density residential development in the district. Some of these new residential uses might be accommodated in and around the area between 41st and 45th Avenues N. High-rise residential towers at strategic points would serve as identifying features**

**denoting this northern entrance to the City.**

**Special purpose residential development, such as housing for senior citizens, bordering Webber Park might be located between the planned I-94 interchange at 45th Avenue N. and the Camden commercial center. Such higher density residential development near the Camden commercial node would bolster area activity by rationally locating a greater number of people within convenient walking distance of both open space and commercial services.**

The Camden commercial area should be consolidated and upgraded as a community commercial center, along with a corresponding mitigation of traffic congestion and the provision of more adequate parking facilities.

## University Area

### CEDAR-RIVERSIDE

Downriver from the Central area, dynamic planning programs for rede-

velopment of the University area West Bank have been initiated by public and private institutions.

Faced with a proposed 1980 student enrollment of nearly 50,000 on its Minneapolis campus, the University of Minnesota began acquiring land to expand from the East to the West Bank of the river fifteen years ago. The 80 acres of the West Bank campus now hold two office towers, two classroom buildings, the main University library, a new performing arts center and a 700-unit dormitory. Extensive plans exist to add more classroom space, including the University's Law School.

Surrounding the West Bank campus and within the Cedar-Riverside federally-aided urban renewal area, Cedar-Riverside Associates, Inc. have been working since 1965 to comprehensively plan and implement a rebuilding program for 100 acres of non-institutional land from the I-35W Bridge to I-94 on the south. While the 1970 census in the area tallied 4,000 people, the plans propose to house 30,000 residents in the next twenty years, and to serve a daytime population of approximately 75,000. As the first designated New-Town-In-Town to receive financial backing from the U.S. Department of Housing and Urban Development, Cedar-Riverside planning utilizes the continuous joint efforts of a nationwide team of multi-disciplined experts and the extensive cooperation of public, private, and institutional organizations. The Cedar-Riverside community now encompasses four major institutions in addition to the University of Minnesota: Augsburg College, Fairview Hospital, St. Mary's Hospital, and St. Mary's Junior College.

**To realize an optimum living environment Cedar-Riverside residents, students and visitors, in addition to having available other necessary recreation facilities, must find relief open space near the high density development. The Riverfront plan will help to accomplish this by providing major passive activity areas along the river, the only non-freeway portion of the area's perimeter.**

**An extension of the West River Road following the base of the bluff will provide motorists with a visually dynamic entrance to the Downtown.**

**Continuous public open space in the form of greenways connecting a series of larger open spaces must be assured**

**along the river bank. Therefore, the preponderance of land below the bluffs, except that required for the extension of the West River Road, should be used for public recreation.**

Urban renewal requirements already stipulate removal of all industry in the Cedar-Riverside area. Only the old City-owned barge terminal and an assortment of liquid storage tanks exist along the West Bank. When the new Municipal Barge Terminal is completed on the Upper River, the entire operation including the piled coal and salt will be removed from the lower terminal.

Open space to be developed in this area should be informal, as natural as possible, and assigned to flexible active-passive recreational usage. The holding capacity in numbers of people should be relatively high though, which means that some hard-edge land forms will be needed, such as surfaced paths to avoid trampling of the more natural elements.

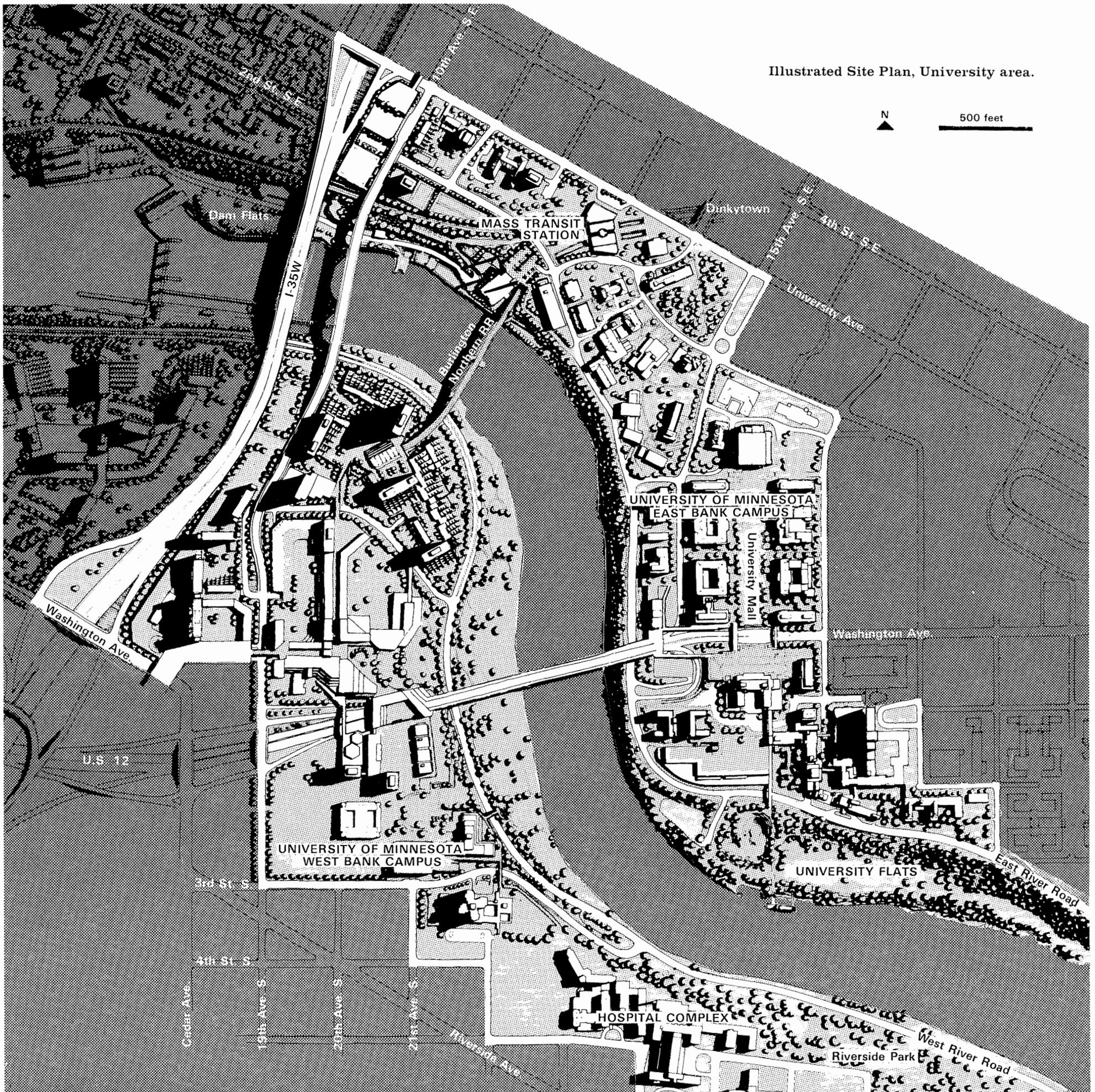
**Recreational uses should include hiking, picnicking, strolling, sitting, and unorganized grass games and sports. The space should not be chalked off, fenced-in, or in other ways reserved for active sports. A river boat restaurant and public small boat landing might be located near the area, but no substantial structure or large parking lot should obstruct the open space land.**

**The West River Road extension should in general follow the base of the bluffs through Cedar-Riverside. Locating the parkway at the inner edge of the flats will define the public open space both visually and psychologically and will avoid both cutting up the open space and obstructing vistas from the top of the bluff.**

For the motorist driving toward the Downtown, great variety in the parkway's character and relationship to the river will appear as he moves from the bluff's upper rim in the Lower River area, to the base of the bluff looking across the park land, and again to a gradual climb up along the bluff north of 35W, ending near the proposed cultural center in the Central area.

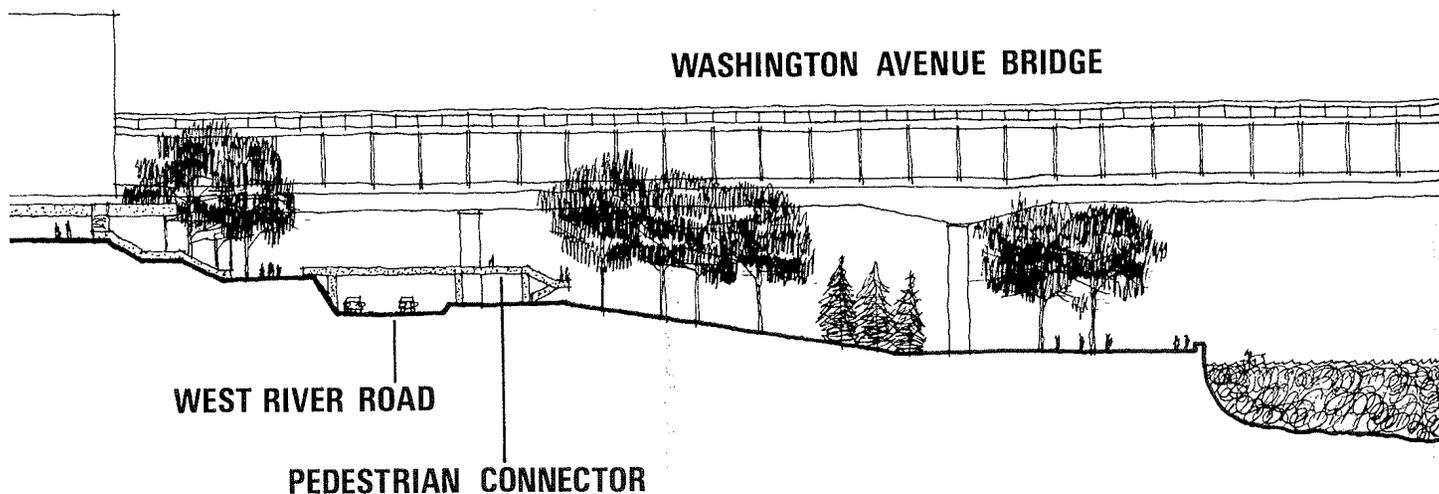
Although the West River Road may have to carry more traffic than many of the City's parkways, it should

Illustrated Site Plan, University area.





By the water's edge in Cedar-Riverside.



nevertheless be sensitively designed to have a parkway-like atmosphere. Where possible a divided roadway, perhaps even vertically separated or slightly stepped up the bluff, would engender such an atmosphere.

**This new segment of the West River Road should not function as a major connection between Downtown and the Cedar-Riverside area.**

Parking may be provided for motorists visiting Riverside Park and the West Bank river edge in pull-offs hidden between the road and the bluff. For other uses, however, parking access must be gained only from the top of the bluff within the Cedar-Riverside housing complex and the West Bank campus development.

Because of the large numbers of projected Cedar-Riverside residents, there should be several pedestrian connectors to the river park from major activity centers in addition to improving the access at Riverside Park.

□ Pathway connections should be created to connect the two hospitals and Augsburg College to the river's edge.

□ Farther north, where the River Road now curves up to its end at the base of the University campus, a pedestrian bridge should give access over the new river road to the river flats.

□ Under the Washington Avenue Bridge a second pedestrian overpass might be connected to the bridge structure, linking the Riverfront open space to plazas and buildings over the bluff.

□ Farther upriver, similar cross-overs may be developed between proposed housing along the bluffs and the open space. The existing Burlington Northern railroad bridge might support on its lower beams a walkway to accommodate East-West Bank pedestrian and bicycle movement.

In addition to pathways through the lower areas, public plazas and courts should be maintained on top and terraced down the bluffs. These multi-level spaces augmented by integrated housing and educational structures on the bluffs will provide for a diversity of visual experiences.

One place where such multi-level activity space would work well is in the north corner of the district. Connecting the paths and park area below with the activity space above the bluffs would facilitate access to the Cedar Avenue Bridge. Another location that offers potential for stair-stepping down the bluffs is south of the Washington Avenue Bridge, where multiple levels of passive space would tie the Riverfront back into the University of Minnesota in the vicinity of the Performing Arts Center. This would also help to link parts of the larger open space below with the Washington Avenue Bridge crossing above.

In all, terraces, pedestrian bridges, and the extension of the road would create along this part of the river a large and varied open space readily accessible in a number of ways. They would help to physically integrate the river with the rest of the district and to tie the district as a whole into the surrounding City.

## EAST BANK

Complementing West Bank development in this area of growth and transition is the University of Minnesota East Bank district, extending from the I-35W Bridge to the I-94 Bridge.

Despite the University's location on the river and the imaginative plans of the first University architect, Cass Gilbert, to orient the main campus mall to the Riverfront, a century of growth has not promoted physical accessibility to Riverfront amenities, nor capitalized on visual or psychological aspects of the proximity. From the Washington Avenue pedestrian bridge or the University Showboat one can make contact with the river environment, but opportunity is still limited when compared to Riverfront potential.

The Southeast Minneapolis community as a whole is cut apart almost totally from the river—by a steep bluff south of the campus, and by railroad tracks and bluff to the north.

Along the railroad tracks cutting through Dinkytown to the Downtown is found one of the best views available of the Downtown skyline and the river. Some of the tracks which lead to Pillsbury, Metal-Matic and other Main Street industries should be removed as industries gradually move out of the Central area. The double tracks leading to the Stone Arch Bridge and Burlington Northern railroad bridge south of the Cedar Avenue Bridge may remain—for use by the railroad or for future rapid transit.

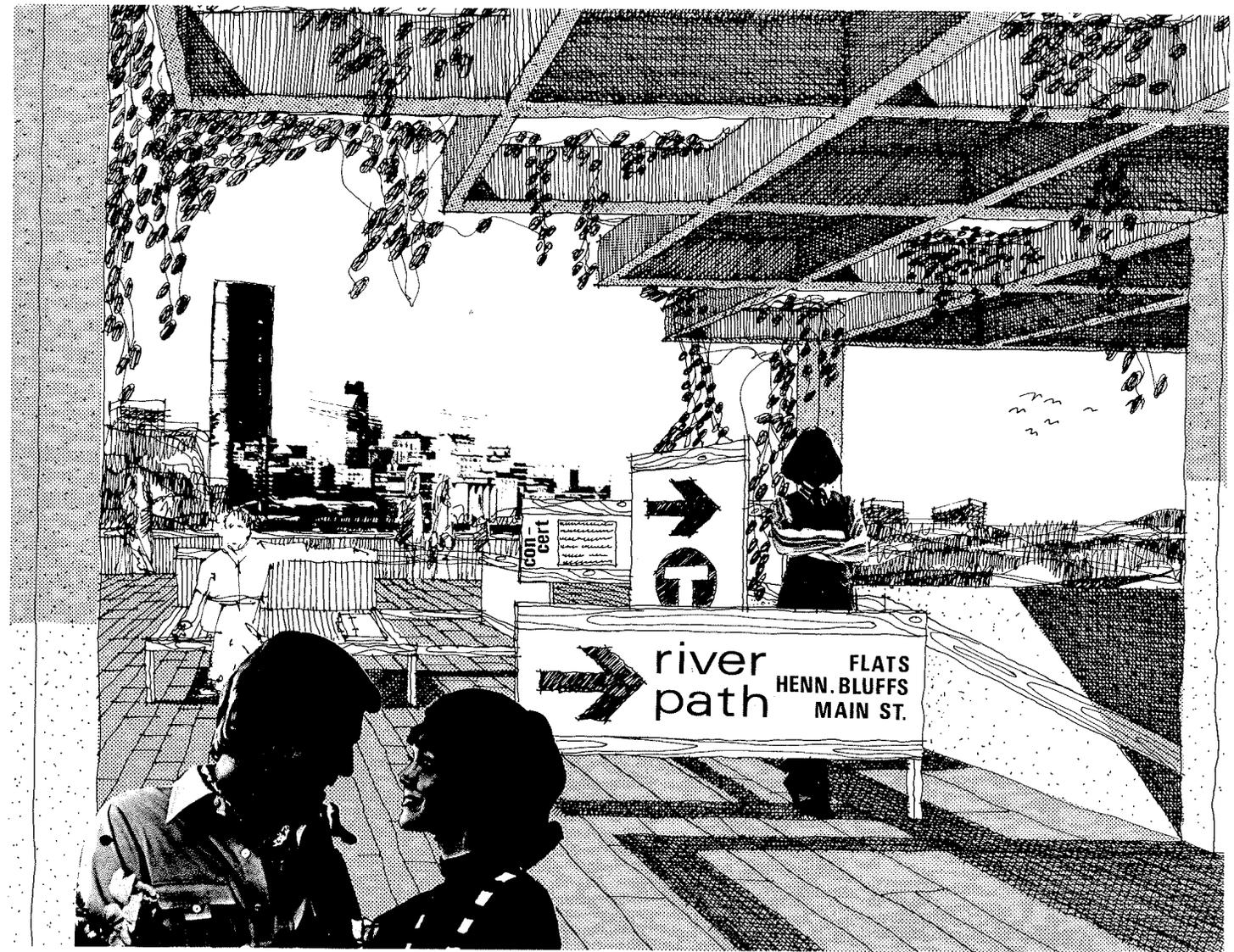
Part of the railroad cut could be redeveloped to form a greenway window which would provide pedestrian linkage between Dinkytown—the commercial center of Southeast—and the river bank. Ramps and steps along the window through Dinkytown would connect the proposed 5th Street greenway with waterfront bicycle and hiking trails.

The East River Road, now curving to an ending at University Avenue, might bridge the rail (transit) corridor and the proposed greenway window to connect with 2nd Street S.E.

This extension of the River Road would complete a loop, tangent to the main parkway system, that would follow an extended West River Road through Cedar-Riverside, Riverfront East, and on to the Gateway—cross the river on either the Third Avenue or Hennepin Avenue Bridge, and follow 2nd Street S.E. back through the Central area East Bank to connect with the East River Road. Access to all proposed major activity areas in the Central area of the river from the parkway system would thus be accomplished.

In order to complete the long discussed "Grand Round" of Minneapolis parkways, the East River Road may be connected to Stinson Boulevard from its present terminus at University Avenue. Such a connection can be made whether or not the Central area loop is accomplished.

The University River Flats, which now serve as a parking lot for University students and Showboat visitors, is owned by the Minneapolis Park and Recreation Board and leased



From the Dinkytown window superb views of the Downtown skyline, physical access to river edge greenways, and convenient access to mass transit might all be available.

to the University. Conversion to public recreational usage is intended by the Park and Recreation Board when the present lease expires. Under no conditions should the river flats remain in parking usage nor should it receive high structural development.

The river flats constitutes one of the best locations on the river for combined marina-recreation usage. It has the distinct advantage of being below two of the three sets of locks in the City and as such may provide better on-water accessibility than Boom Island for those who would boat between Minneapolis, St. Paul, and the St. Croix.

**One alternative, therefore, for river flats use is as the major or secondary marina on the Mississippi in Minneapolis. A second alternative for river flat use, as shown in the illustrations, would incorporate a small-boat public landing for shells and**

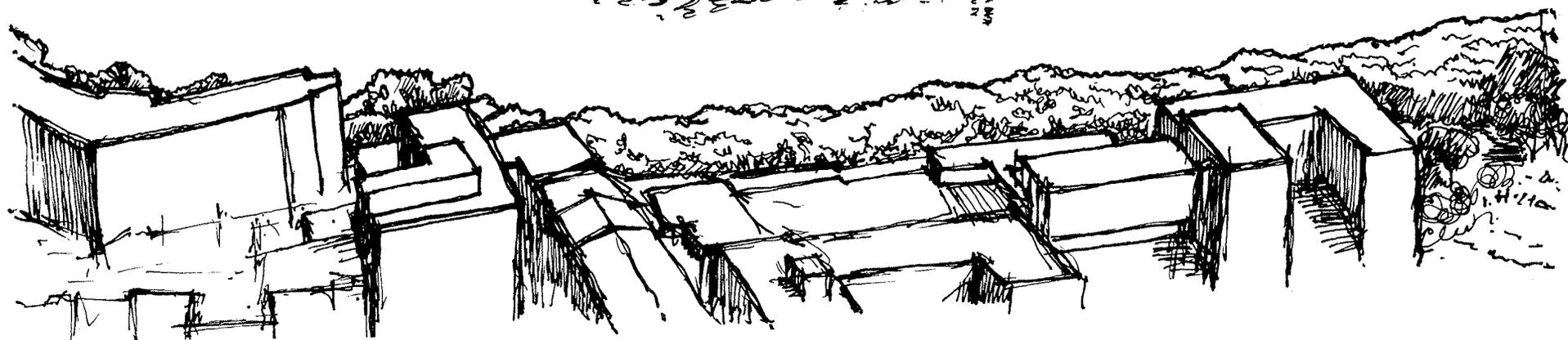
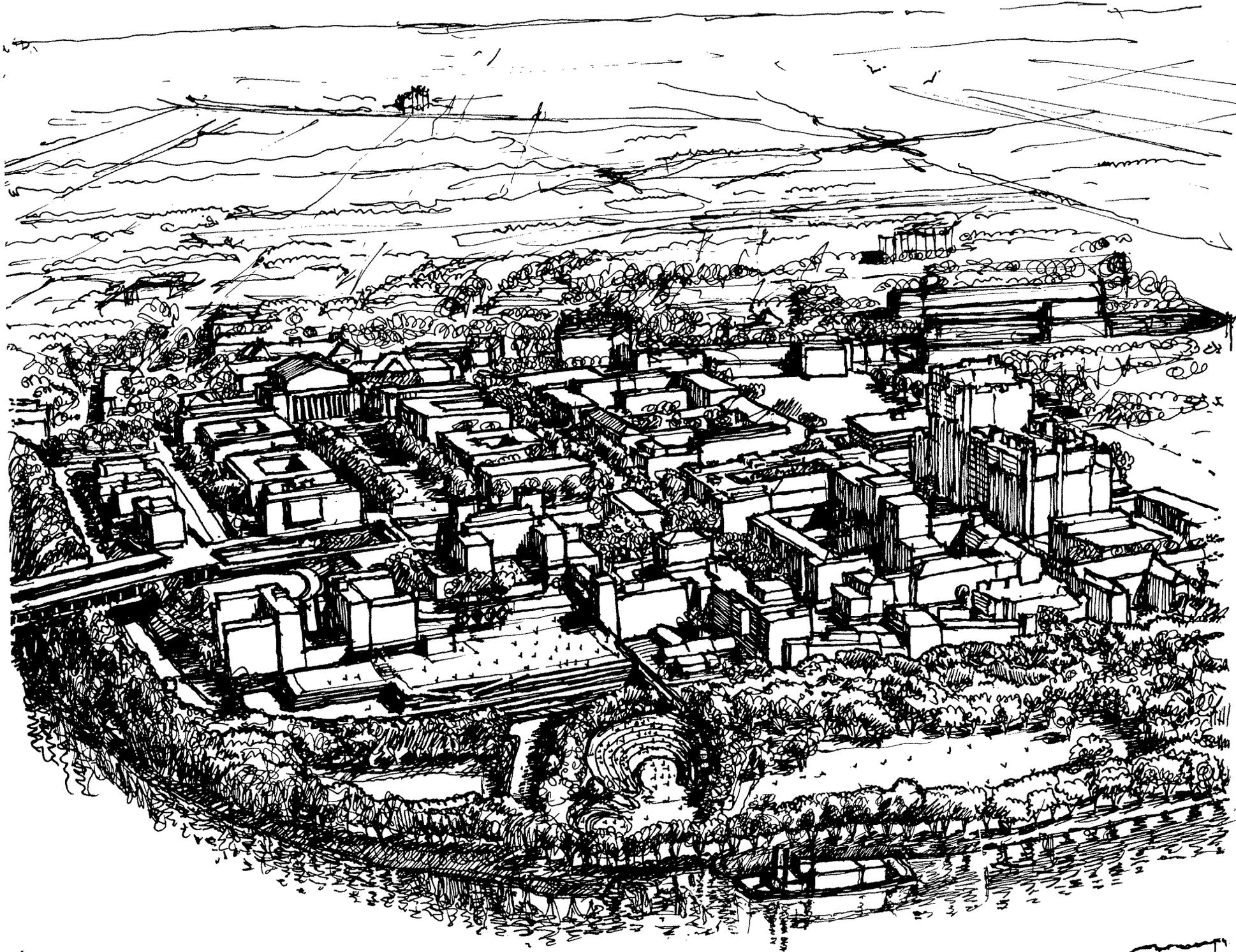
**canoes as part of a broader plan to turn the flats into a recreational activity focal point on the Riverfront. One or two small amphitheatres in addition to the Showboat would extend campus activity to the river's edge to be used by the general public as well as by University students. Remaining space could be adapted to passive and active recreation—hiking, picnicking, bicycling, eating lunch, sun bathing, dancing, and informal field games. Only an emergency service road leading to the Showboat and boat landing should intrude upon the river flats open space.**

The Showboat may well remain at the flats, or alternatively could be located across the river near the existing Washington Avenue Terminal. And the flats could harbor another large floating or stationary boat for parties,

excursions, and/or dining in addition to the Showboat.

University planners are concerned with the task of remodeling Coffman Union. Providing access from the Union to the river flats might be accomplished by terracing portions of the roof top of parking ramps below Coffman Union, with steps leading down to a pedestrian walkway bridging East River Road. Use of the landscaped parking ramp roof would open up to increased public activity an existing plaza space with elegant river vistas.

Alternatively the existing pedestrian walkway, from the first floor of the Union to an elevator tower connected to the parking ramp facing East River Road, might be utilized for Riverfront access. A clear route through or along the ramp to a pedestrian bridge crossing East River Road would be required.



Activity on the University Flats.

Bicycle paths and hiking trails extending downstream from the river flats would pass attractive wooded bluffs and quiet sand bars in the magnificent gorge. Upstream the pedestrian would pass in sequence through soft-edge and hard-edge areas as more man-made physical environments—bridges, town apartments, dams, locks, and skyline—come into view.

Downstream from the river flats, bicycling will have to remain at the top of the bluff because of its sharp pitch. Pedestrian and bicycle paths should be separate—divided from the roadway as much as possible. This can be done by increasing the distance from sidewalk to road, by building low walls, or by adding planting.

Where steep bluffs with little or no base exist along the University East Bank, a walking path might be constructed as a boardwalk below the sharp rim of the bluff.

One of the existing facilities thwarting the development of a river edge path has been the University heating plant where fences extend to the edge of the banks. A recent boon to the Riverfront development is the University's conversion to gas heating, eliminating coal barges and piled coal located by the plant. This conversion has facilitated the development of a bypass with parapets, paths, and foliage in front of the plant to allow pedestrians and bicyclists a continuous route close to the river's edge.

## Lower River

The Mississippi gorge, extending from the University of Minnesota to Fort Snelling, is a magnificent natural open space. Careful attention to the potential holding capacity of the Lower River area, and therefore to its planned intensity of use, is demanded to preserve its natural features and ecological balance.

The optimum holding capacity (number of people per acre) of the soft, natural-form Lower River is clearly much less than that of the largely man-made Central area open spaces.

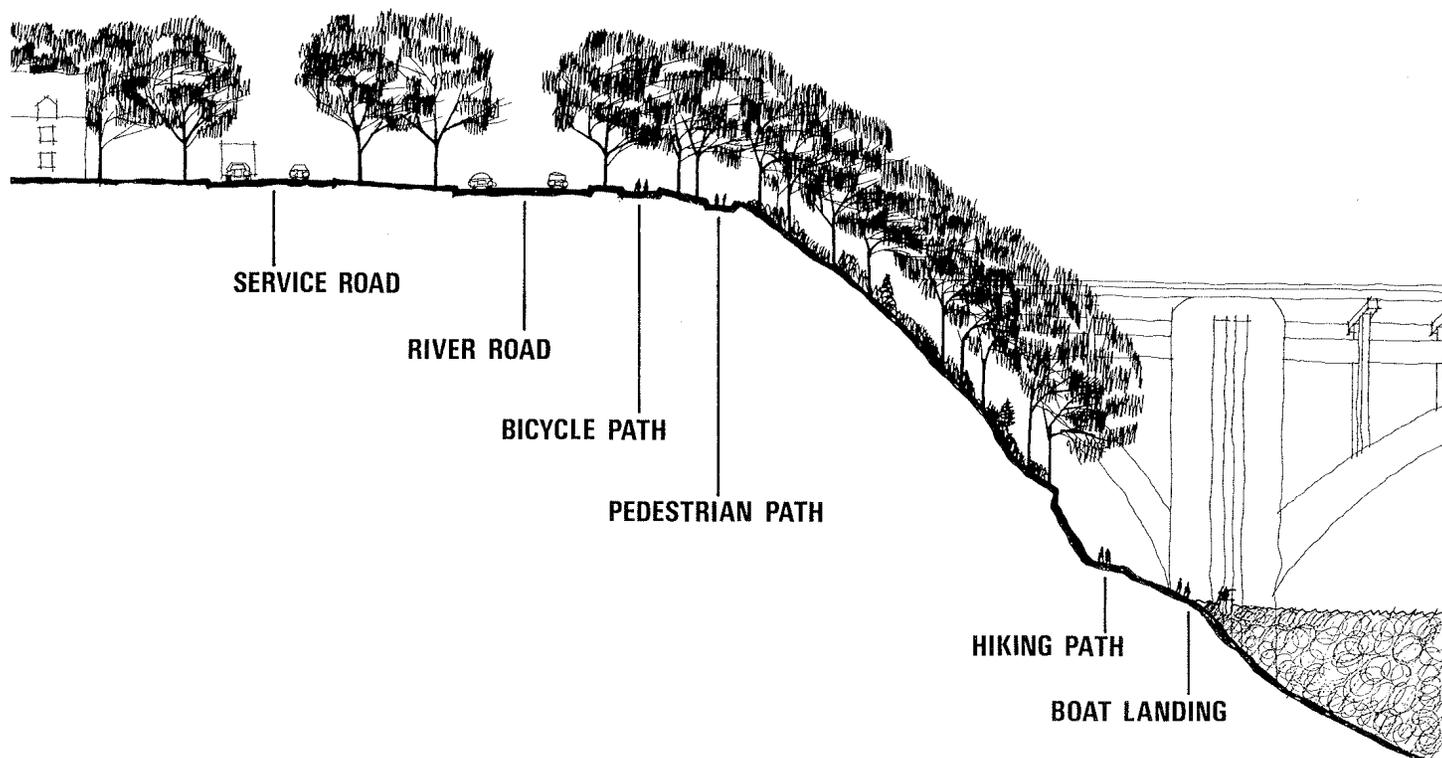
During the summer the few areas of the Lower River which are easily accessible to pedestrians reach the limit of their holding capacity. On the other hand, large parts of this linear gorge can take some increased use without damage. Carefully improved accessibility to the lower bluff or flats along the river would help to reduce the concentration of use in a few sections.

A continuous pathway system along both banks from the University to Fort Snelling should be developed. For pedestrians and bicyclists pathways should follow as closely as possible the top edge of the bluffs, clearly separated from each other wherever possible.

For hikers another trail should run along the base of the rocky bluffs, offering a variety of environments as it passes over open sand bars, under bridges, and through the forest. This hiking trail should be linked at intervals to the upper trail by paths that either step up or gradually climb the bluffs.

Simple, uncluttered landings for canoes and shells may be established at intervals along the Lower River.

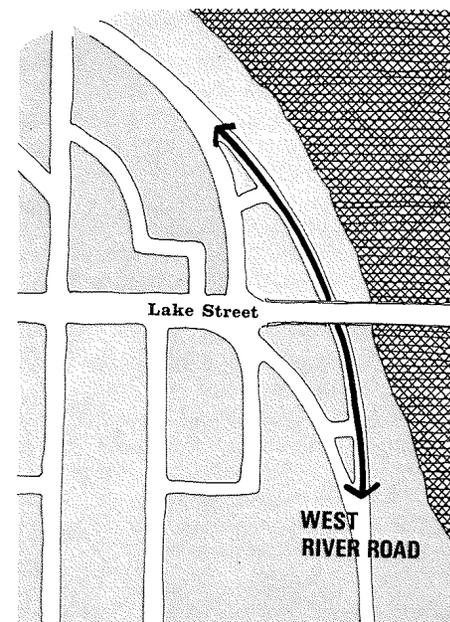
2. The greenway concept calls for use-separated pathways the length of the Lower River.



A boat bus might offer daily river tours—leaving the Downtown area, stopping at Minnehaha or Fort Snelling State Park and continuing on to St. Paul. Such a tour could be keyed into entertainment, like a Showboat performance, or to refreshment at Riverfront restaurants at either end.

The existing use of the Lower River for rowing and sculling should be protected and expanded, perhaps by establishment of a public boat rental facility emphasizing only non-motorized boats. Power boats passing through the area from other areas should be held to minimum speeds as they move along this part of the river. Conflicts between barges, recreational power boats and rowing would be partially alleviated by better designation of channels more exclusive to each use, and by better information for boaters concerning lock schedules.

From the scenic river drives along the bluffs every motorist should be conscious of the river—glimpsing it, sensing it, knowing that he can park and walk along it. In addition to improved signing, careful pruning of trees and shrubs along both banks is required to enhance such a feeling. Nevertheless the forested appearance and general natural state of the bluffs themselves should remain unchanged.



1. Proposed River Road bypass of Lake Street to provide continuous bicycle and pedestrian pathways.

In his 1971 study of the Minneapolis Parkway System, the Park Board's consultant suggests that the Franklin Avenue Bridge become part of the Grand Round of parkway, connecting the West and East River Roads, and that this route should be indicated on the main parkway road system map. It is also proposed that the parkway be lowered to pass under the west side of the Lake Street Bridge to eliminate

pedestrian and vehicular crossing of this heavily used intersection. He then suggests that parking areas along the bluffs should be designed as small turnouts, screened from the road by mounded earth forms and planting, yet designed to allow proper policing.

These proposals are in accord with Riverfront planning. Scattered small parking areas will aid in evening out the intensity of Riverfront use. As the turnouts are completed, parking on the River Road should be eliminated.

The East and West River Roads are now lined with handsome, single family homes, the only exceptions being several institutions and some high-rise housing a block inland from the river bank. With potent alternatives in other locations the further development of high density,

high-rise housing along the Lower River is not appropriate.

Greenway windows from the river bank into the neighborhoods are not as necessary along the Lower River as they are in most other parts of the Riverfront. One reason is that in this area, the low residential traffic volumes and lack of conflicting land uses render every street, in a way, a window. Minnehaha Creek should, of course, continue to serve as river access and special attention may be given 35th Street S. as it connects to Longfellow Field.

Minnehaha Park, at the southern end of the Riverfront area, often exceeds its maximum holding capacity. With the development of river activities at other locations, some of the pressure on this well-planned park might be

eased to create greater pleasure for those who view Minnehaha Falls.

Some portion of the park site below the falls would provide an excellent location for a unique children's park, perhaps following experientially the theme of Hiawatha or of another legend reflecting the lives of Minnesota's earliest inhabitants.

Although this Riverfront plan ends, for the most part, at the City's border, proposals in the "Plan for the Mississippi Waterfront in St. Paul" suggest that the area from Minnehaha Park to Fort Snelling be held as open space. Multiple paths should extend into the hills south of Minnehaha, to continue downriver to Fort Snelling State Park and beyond to connect the Minneapolis Riverfront with the greater metropolitan open space system.

Pruning of trees along the River Roads will open up presently hidden river vistas.

