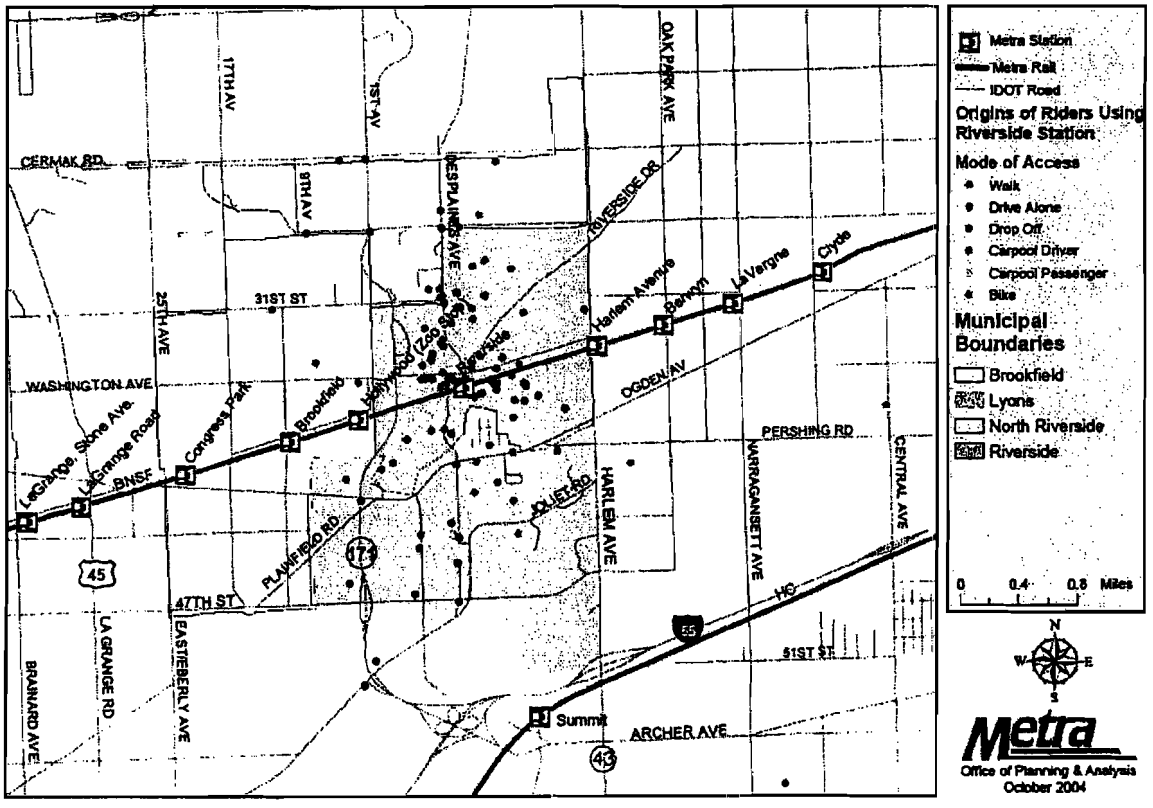
Table 2 Mode of Access to Station

Distance	Walk		Drive		Pass		Total	
< 1/2 mile	146	89%	6	4%	11	7%	163	37%
1/2 to 1 mile	66	52%	23	18%	39	30%	128	29%
> 1 mile	7	5%	129	88%	11	7%	147	34%
Total	219	50%	158	36%	61	14%	438	100%

Home Origins of Metra Riders

The following figure shows the home origins as well as mode of access for riders at the Riverside station. The green dots indicate walkers to the station. There are slightly more riders coming from the west side of the Village. The largest concentration of walkers is the quadrant northwest of the station with 45% of the station riders. This statistic would indicate that a tunnel located to the west of the station would be more convenient.

Riverside Station Origins by Mode of Access



Parking

Metra maintains parking inventory and occupancy information for every station in the system. Currently, 162 parking spaces are identified as commuter spaces by Metra. Two-thirds of the parking is located to the west of Longcommon Road, most of which is in the 95 space parking (Lot 1 on the Metra Map). Table 3 contains the most recent occupancy counts which show that the parking is well used. Nearly all of the daily fee spaces were occupied (97%) while occupancy in the permit spaces was lower (69%). The location of parking west of Longcommon would support a shifting of the pedestrian tunnel to the west.

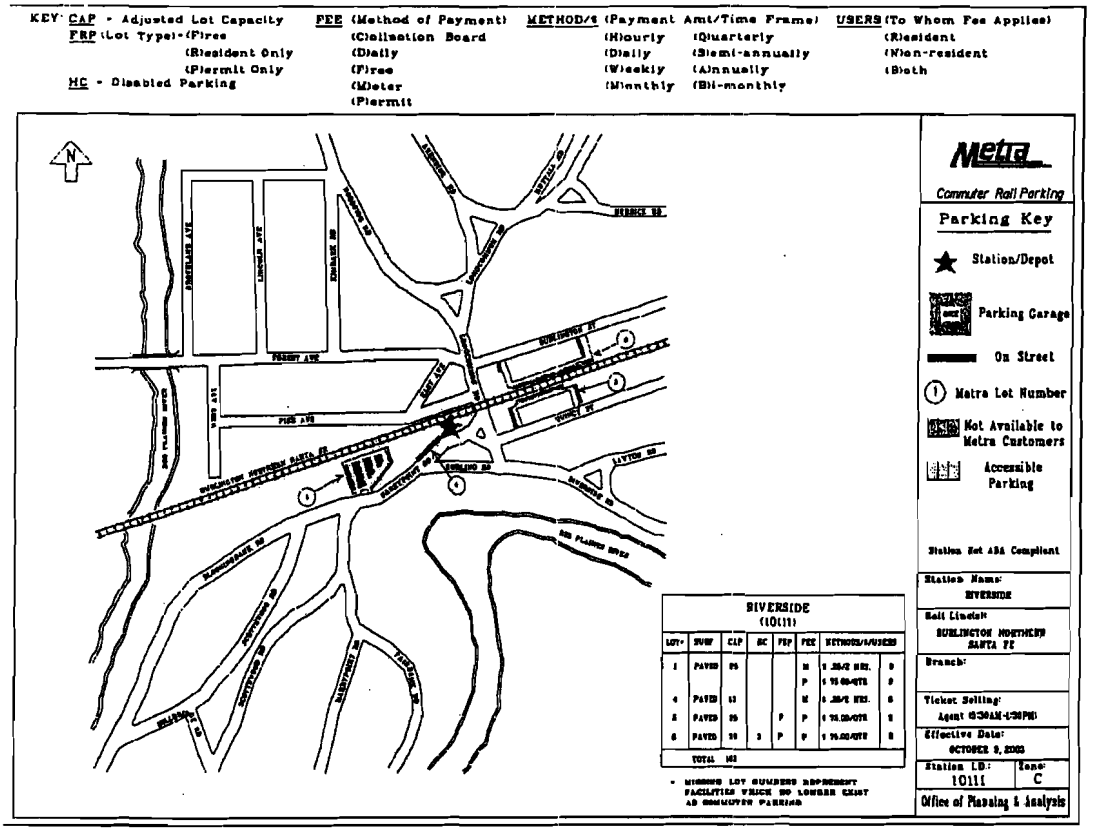


Table 3 Parking Inventory and Occupancy

Lot	Daily		Permit		Handicapped		Total	
	Cap	Use	Cap	Use	Cap	Use	Cap	Use
1	68	66	27	17	0	0	95	83
4	13	13	0	0	0	0	13	13
5	0	0	25	21	0	0	25	21
6	0	0	29	18	3	0	32	18
Total	81	79	81	56	3	0	165	135

Potential Funding Sources

The construction of a new pedestrian tunnel will be a significant undertaking requiring significant capital funding. As the attached table indicates, there are a number of funding sources that could be used to pay for the project. Realistically, none of the sources would be able to fully fund the cost of the project. Therefore, it is likely that funding from a combination of sources will be required. The most likely sources include: Congestion Mitigation and Air Quality (CMAQ) Improvement Program, Illinois Transportation Enhancement Program (ITEP) and Grade Crossing Protection Funds. It may be possible to supplement these sources with small allocations from the Council of Mayors Surface Transportation (STP) funds and Metra.

Permitting Requirements

The project is not expected to have any significant permitting issues. As the attached table summarizes, none of the funding agencies that may be involved in the project will require "permits". However, each funding agency will have specific grant requirements that will need to be followed. Overall, the major "permitting" type requirements are as follows:

1. **ADA**. Any new pedestrian tunnel will need to be fully ADA compliant. Since rehabilitation of the tunnel will exceed 15% of the replacement costs, rehabilitation will also need to be fully ADA compliant
2. **NEPA**. The project will need to comply with the requirements of the National Environmental Protection Act (NEPA). This is not expected to be a difficult issue.
3. **ICC Order**. A petition and Illinois Commerce Commission (ICC) Order will be required.
4. **Grant Contracts**. The Village will be required to follow additional grant contract requirements that will vary slightly agency to agency.
5. **Plan Approval**. During the design process, plans must be prepared in accordance with BNSF, Illinois Department of Transportation (IDOT) (if IDOT or Commerce Commission funds are used) and Village standards. Review and approval of each agency will be required.
6. **Village Building Permit**. The project will need the standard Village Building Department permit.
7. **BNSF Right of Entry**. The contractor will need to obtain a right of entry permit from the BNSF which includes substantial insurance and railroad protective insurance requirements, roadway worker training and acceptance of BNSF liability and indemnification requirements.

Potential Funding Sources For Riverside Tunnel Replacement

Fund Source	Program	Administration	Purpose	Restrictions/Limitations
Federal	Congestion Mitigation & Air Quality (CMAQ)	Chicago Area Transportation Study (CATS) www.catsmpo.com	Finances projects that improve air quality and reduce congestion. Funding requires a 20% local share (non-Federal dollars).	Significant competition for these funds. Preference is to fund construction rather than design. Village has submitted an application for $1.6 million.
	FTA Section 5307	Projects submitted for MPO review by RTA Service Boards (Metra)	Finances capital improvements to transit systems in all urbanized areas. Funding requires a 20% local share.	Metra would have to program funds. Metra facing significant capital needs with limited funding. This source may have limited potential.
	Surface Transportation Program (STP-U)	Projects submitted for CATS review by CATS Council of Mayors	Finances roadway, bridge and transit capital projects.	Each CATS Council of Mayors programs projects within respective areas. All anticipated funds have been programmed through 2012. Funding up $1,000,000 may be possible with reappropriation.
	Safety Funds (STP-S)	IDOT submits projects for MPO review	Ten percent of STP funds are set aside for safety projects.	Funds are normally used for roadway safety improvements. Therefore, this source may have limited potential
	Enhancement Funds (STP-E)	IDOT selects projects (Illinois Department of Natural Resources and the Illinois Historic Preservation Agency assist) after NIPC and CATS review and evaluation www.dot.state.il.us/	Ten percent of STP funds are set aside for projects which enhance the transportation system through preservation of visual and cultural resources and improve the quality of life. Program provides for 80% reimbursement.	Pedestrian and bicycle facilities are eligible. Significant competition for these funds. Grant award could not be expected to fund entire project.
State	Grade Crossing Protection Fund	Illinois Commerce Commission www.icc.illinois.gov/	Finances improvements at highway grade crossings, grade separations and safety improvements. Program provides up to 60% of cost.	Pedestrian separations are eligible. Funding is limited to $2 million per year statewide.

Permitting and Environmental Studies

Agency		Permitting Requirements
Funding Agencies		
FTA	General	No Permitting Requirements. Will have a number of grant requirements for public bidding, contract award, ADA compliance, DBE requirements, NEPA, etc.
	NEPA	All projects using Federal funds are required to comply with the requirements of the National Environmental Protection Act (NEPA). The project has been discussed with the Federal Transit Administration. It is anticipated that the project would be a "Class II" (Categorical exclusion) action which does not require the preparation of an Environmental Assessment. If it is determined that land must be acquired and/or the park area to the south will be impacted then additional environmental assessment may be required.
	ADA	Under a ruling issued on September 6, 1991, the U.S. Department of Transportation requires compliance with the Americans with Disabilities Act (ADA). Section 4.1.1 of the regulations requires that all newly designed or constructed facilities comply with accessibility requirements. Further, 4.1.6 states that "If an escalator or stair is planned or installed where none existed previously and major structural modifications are necessary for such installation, the a means of accessible vertical access shall be provided". This requirement is repeated in section 10.3 as it relates to the construction and or alteration of Fixed Facilities and Stations. These provisions leave little doubt that any newly constructed tunnel and stairs would also require ramps (or elevators).
IDOT	General	No Permitting Requirements. Projects are normally administered through IDOT Local Roads. Will have a number of requirements for design process (Phase 1, Phase 2 approvals etc.), public bidding, contract award, ADA compliance, DBE requirements, NEPA, etc.
	NEPA	IDOT follows a similar but different NEPA process from FTA. All NEPA activities are included in the Phase 1 Engineering process.

Permitting and Environmental Studies

Agency		Permitting Requirements
ICC	General	ICC works in coordination with IDOT and the railroads to review and approve construction plans. ICC will require the preparation of a petition for the construction of the crossing and any use of Commission funds. This will be followed by a hearing process and the preparation of a Commission Order for the improvement and any obligation of funds.
Railroads		
BNSF		Will require a Right of Entry (Form C-1). This includes requirements for Railroad Protective Insurance, Railroad Flagmen and Roadway Worker course for each on-site employee. Design coordination, plan review (normally 30% and 80%) and final approval will be required.
Metra		If funding flows through Metra, Funding and Maintenance and Operations Agreements will need to be executed. These will pass through all of the grant requirements of the primary funding agencies (FTA and IDOT) as well as operations and maintenance standards and ownership issues.
Village		The Village would follow its normal permitting process as administered through the Building Department.

ATTACHMENT 4
PROS AND CONS MATRIX

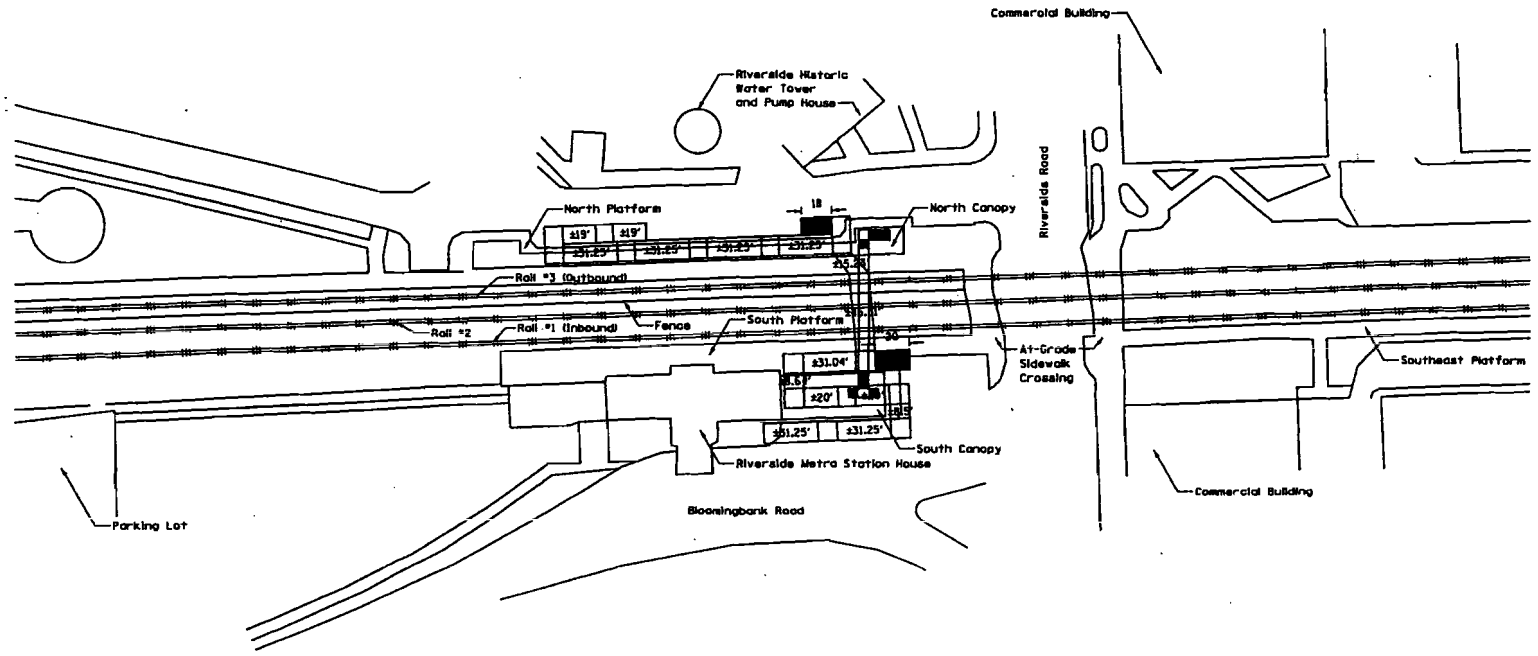
Description/Objective	Rehabilitation		Alternative 1A/B		Alternative 2		Existing Alignment		Abandonment	
	Pro	Con	Pro	Con	Pro	Con	Pro	Con	Pro	Con
Majority of pedestrian commuters access the station from the northwest			x			x				
Swimming club and commuters' parking lot on the southwest			x			x				
Affect to utilities	x		x			x	x		x	
Easy access from platform (both sides)	x		x			x	x			x
Impact to station structures	x		x		x			x	x	
Existing tunnel can stay in service (during construction)		x	x		x			x		
Proximity to commercial buildings	x		x			x	x		x	
Easy access to at-grade crossing	x			x	x		x		x	
Long ramp lengths to maintain ADA compliance	x			x		x		x		
Deep construction near railroad	x			x		x		x		
Ease of construction			x			x		x	x	
Loss of commercial property	x		x			x	x		x	
Security and adequate tunnel size		x	x		x		x			x
Availability of funding sources		x	x		x			x		x
Cost	x			x		x		x	x	
Long term solution		x	x		x		x			x
Future bike trail link		x	x		x			x		

ATTACHMENT 5
COST BREAKDOWN

Rivserside Tunnel Study Cost Breakdown

Task	West Alignment - Option 1A/B	East Alignment - Option 2	Existing Alignment
Engineering - Design	$60,000	$70,000	$75,000
Engineering - Testing	$0	$0	$15,000
Construction Management	$25,000	$25,000	$35,000
Ramp Construction	$1,000,000	$1,200,000	$1,600,000
Tunnel Construction	$1,800,000	$2,000,000	$2,300,000
10% Contingency	$288,500	$329,500	$402,500
Total Opinion of Probable Cost	**$3,173,500**	**$3,624,500**	**$4,427,500**

ATTACHMENT 6
PROPOSED TUNNEL LOCATION SKETCHES



RIVERSIDE METRA STATION
TUNNEL OPTION - EXISTING ALIGNMENT

0 40' 80'

N

EXISTING ALIGNMENT OPTION

BNSF/METRA PEDESTRIAN TUNNEL STUDY
VILLAGE OF RIVERSIDE
RIVERSIDE, ILLINOIS

STRAND ASSOCIATES, INC. ENGINEERS

6-900-002
FIGURE NO. 1

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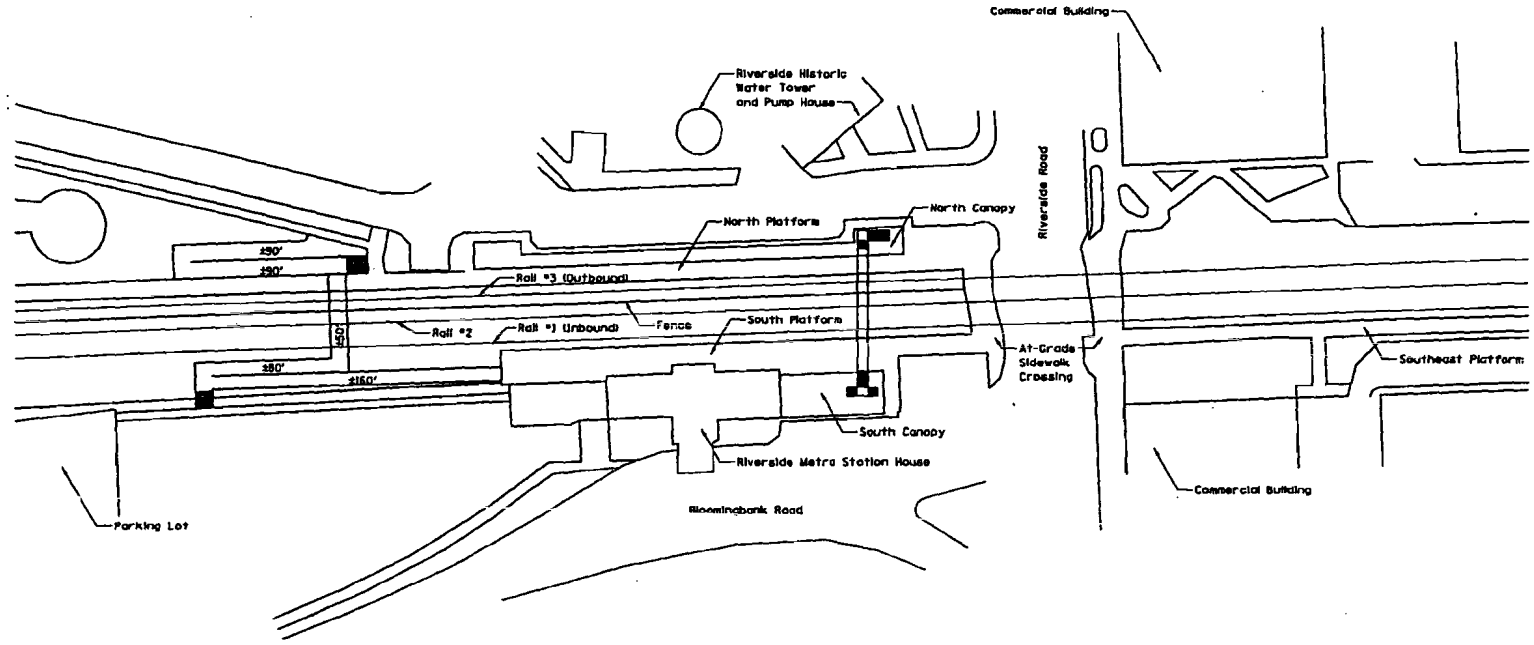

RIVERSIDE METRA STATION
TUNNEL OPTION 1A

0 40' 80'

N

TUNNEL ALIGNMENT OPTION 1A

BNSF/METRA PEDESTRIAN TUNNEL STUDY
VILLAGE OF RIVERSIDE
RIVERSIDE, ILLINOIS

STRAND ASSOCIATES, INC. ENGINEERS

8-900-002
FIGURE NO. 1A

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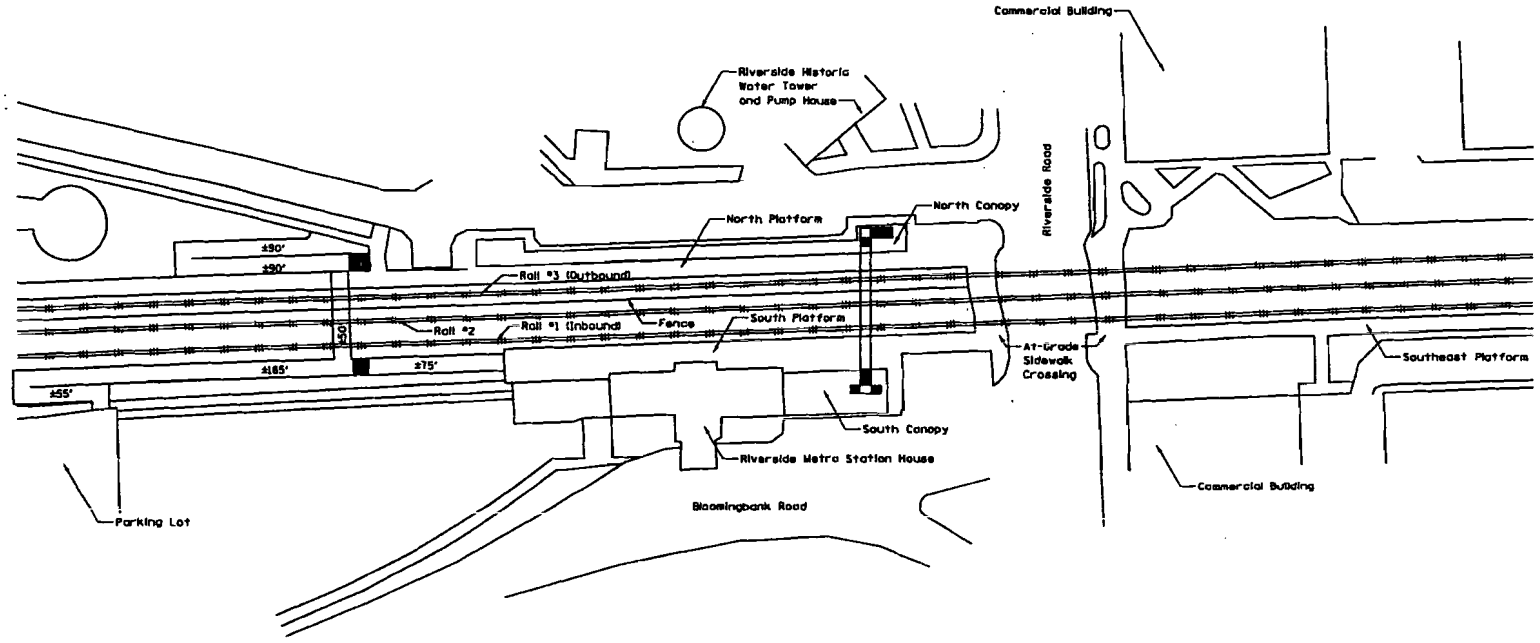

RIVERSIDE METRA STATION
TUNNEL OPTION 1B

0 40' 80'

N

TUNNEL ALIGNMENT OPTION 1B - WEST ALIGNMENT

BNSF/METRA PEDESTRIAN TUNNEL STUDY
VILLAGE OF RIVERSIDE
RIVERSIDE, ILLINOIS

STRAND ASSOCIATES, INC. ENGINEERS

6-900-002
FIGURE NO. 1B

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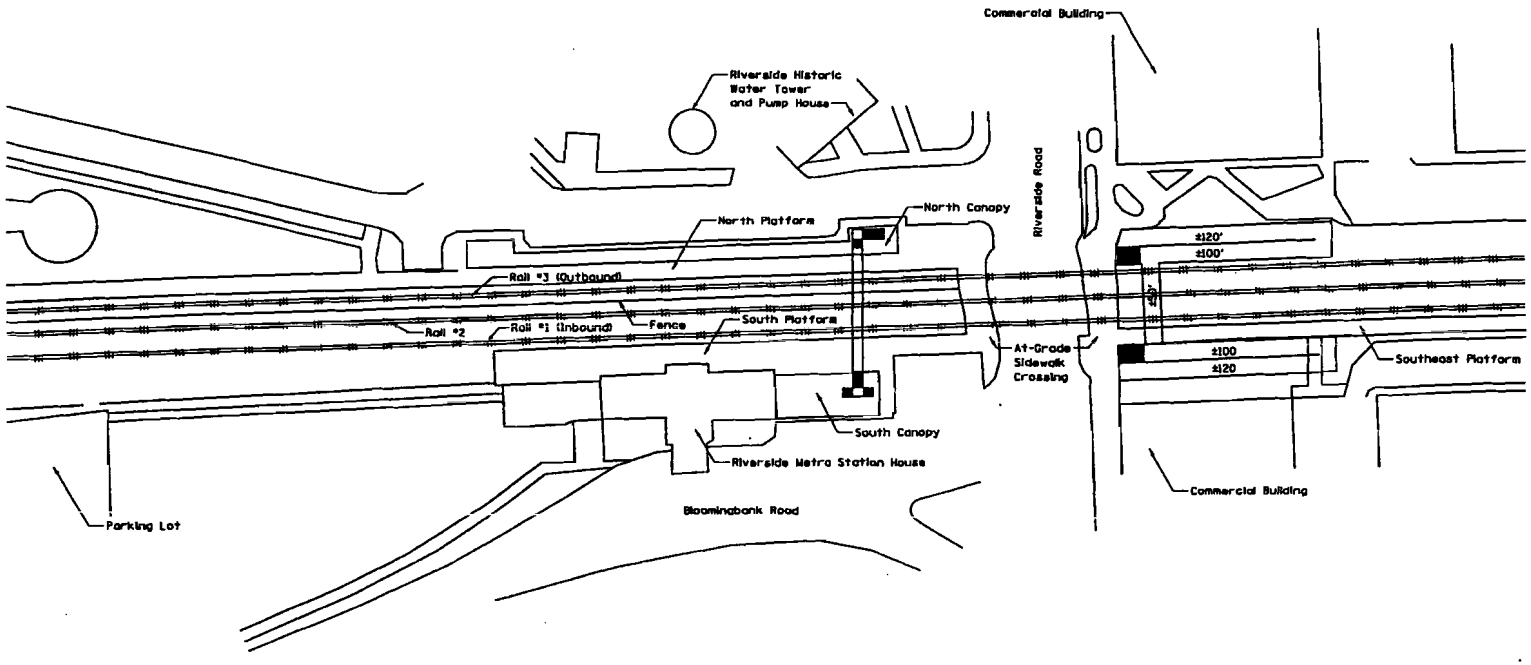

RIVERSIDE METRA STATION
TUNNEL OPTION 2

0 40' 80'

N

TUNNEL ALIGNMENT OPTION 2 - EAST ALIGNMENT

BNSF/METRA PEDESTRIAN TUNNEL STUDY
VILLAGE OF RIVERSIDE
RIVERSIDE, ILLINOIS

STRAND & ASSOCIATES, INC. ENGINEERS

6-900-002
FIGURE NO. 2A

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PROOF OF SERVICE

Robert J. Prendergast, an attorney, certifies that on the 20th day of March, 2008 he caused to be served, a true and correct copy of **BNSF RAILWAY COMPANY'S APPLICATION FOR LEAVE TO ISSUE A SUBPOENA TO STRAND ASSOCIATES, INC. TO APPEAR AND TESTIFY AT THE HEARING IN THIS MATTER** upon:

Brian Vercruysse
Illinois Commerce Commission
527 East Capitol Avenue
Springfield, Illinois 62701
bvercruy@icc.illinois.gov

Elizabeth Flood
Commuter Rail Division of the RTA
547 West Jackson Boulevard
15th Floor
Chicago, Illinois 60661

Harold J. Wiaduck, Jr.
Village Board President
27 Riverside Road
Riverside, Illinois 60546

Kathleen Rush
Village Manager
Village of Riverside
27 Riverside Road
Riverside, Illinois 60546

Arlene Blaha
Village Clerk
Village of Riverside
27 Riverside Road
Riverside, Illinois 60546

Mr. Anthony Standish
Strand Associates, Inc.
1170 South Houbolt Road
Jolliet, Illinois 60431

by depositing same in the U.S. Mail depository located at 55 West Monroe, Chicago, Illinois in an envelope(s) with first-class postage, prepaid.

(s) Robert J. Prendergast
Robert J. Prendergast