

HISTORIC RESOURCES BRANCH
ARCHAEOLOGY DIVISION

TECHNICAL BACKGROUND REPORT
EAST YARD TASK FORCE
March 1987

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PREFACE

The East Yard Task Force was established by the City of Winnipeg, the Province of Manitoba and the Government of Canada in the spring of 1986 under the initial Core Area Initiative Agreement to complete preliminary steps leading to a major redevelopment of the CN East Yard railway area, including review of issues pertaining to this site and the preparation of recommendations regarding a concept plan for development, a financial plan, and an implementation mechanism.

The East Yard Task Force, in December 1986, published its Report to the Winnipeg Core Area Initiative Policy Committee, including a review of its work and a statement of recommendations pertaining to redevelopment objectives and principles, a preliminary concept and financial plan, development strategy and zoning, a mechanism for implementation and public consultation, and steps to implement the recommendations. The Policy Committee has subsequently endorsed unanimously the December 1986 Task Force Report.

The Technical Background Report presents additional information and analysis covering Task Force staff investigations potentially relevant to the future planning of the East Yard (see Section 2.2 of Task Force Report). It covers the following technical information not included in the December 1986 Task Force Report:

- PART I: GENERAL BACKGROUND
- PART II: OVERVIEW OF OTHER PROPOSALS
- PART III: BACKGROUND INFORMATION ON THE EAST YARD
- PART IV: SITE AND DEVELOPMENT PLANNING INVESTIGATIONS

This information is presented to assist the Interim Board, interested developers and others who will participate during the spring of 1987 in the public consultation and planning process to finalize a redevelopment plan for the East Yard.

PART 1
GENERAL BACKGROUND

1.1 DECEMBER 1986 TASK FORCE REPORT

The December 1986 Task Force Report provides general background information on the Task Force and its work, including:

authorization and terms of reference

- Task Force members and advisors
- East Yard Development Area (Figure 1)
- Outline of Task Force work and consultations

CN-DRIE understanding on principles for land transfer

In addition to discussing implementation mechanisms, the Task Force Report also reviews redevelopment objectives and principles, a strategy for development, zoning, and a preliminary concept and financial plan for the site; the Report presents analysis on the basic access and servicing system for the East Yard as well as development plan options, including:

- York and St. Mary Avenue system to be developed (Figure 2)
- additional Main Street access options to the site (Table 4.1)
- other access and servicing considerations
 - location of public land and CN retained lands (Figures 2 and 3)
 - primary focus for initial development and mix of components
 - review of three possible development plans (Figures 4, 5 and 6 covering Options 2, 1 and 3 respectively)
 - review of present zoning and recent proposals
 - review of potential public and private sector investment and self sufficiency requirement for new public development agency

This Technical Background Report focuses on additional Task Force information and analysis not included in the December 1986 Task Force Report. Readers are referred to the December 1986 Task Force Report to obtain figures and information already presented on this site. For convenience, the following key figures and tables are reproduced here:

1. Figure 1.1 - map showing existing ownership of the redevelopment area (Figure 1 from Task Force Report)
2. Figure 1.2 - map showing proposed future land ownership and access (Figure 2 from Task Force Report)
3. Table 1.1 - Comparison of Main Street Access Options

The December 1986 Task Force Report has been reviewed and unanimously endorsed by Canada, Manitoba and the City of Winnipeg. Accordingly, the three governments have established a ten person Interim Board made up of directors appointed by each level of government with a chairperson from the community appointed unanimously by the three governments. The initial work of the Interim Board, including ongoing planning and public consultation, will generally be guided by the Task Force Report which outlines the initial tasks and responsibilities of the Interim Board.

1.2 MEMORANDUM OF UNDERSTANDING RE: LAND EXCHANGE

Canadian National (CN) and the federal Department of Regional Industrial Expansion (DRIE) have signed a Memorandum of Understanding (MOU) which outlines the terms and conditions of the proposed land exchange between CN and the new tri-level public development agency.

The MOU generally corresponds with the principles for land transfer set out in Section 2.1 of the December 1986 Task Force Report. Specific provisions include:

1. approval by CN and DRIE as a Concept Plan for the lands, of the relevant sections of the Task Force Report, including the following paragraphs of the Summary of Recommendations:
 - a. the eleven site planning principles as set out in paragraph 1(b)
 - b. the preliminary concept plan as set out in the following paragraphs:
 - paragraph 2(b) dealing with primary focus for initial development
 - those portions of paragraph 2(c) and Figure 2 (Figure 1.2 herein) specifying the recommended configuration for the York and St. Mary Avenue extension and the major north/south access in the Redevelopment Area linking to this extension

TABLE 1.1

COMPARISON OF MAIN STREET ACCESS OPTIONS

	Assiniboine River Area Underpass	Assiniboine Avenue Area Underpass	Union Station Underpass
Type of underpass structure	existing	new	existing
Degree of underpass modification	modest	new major structure	substantial
Cost of underpass	under \$1 million	about \$2 million	likely under \$1 million*
Design, approval and construction time for underpass	6-12 months	30-40 months	30-40 months
Prospect of all-direction access from Main Street	possible (not preferred by Streets & Transportation)	possible (not preferred by Streets & Transportation)	not possible
Activities needing relocation	HBC parking lot	HBC parking lot	Union Station loading dock
Flood line approval	required	not required	not required
Traffic speed	below standard	standard	standard
Character of roadway	river drive	tunnel access	tunnel access

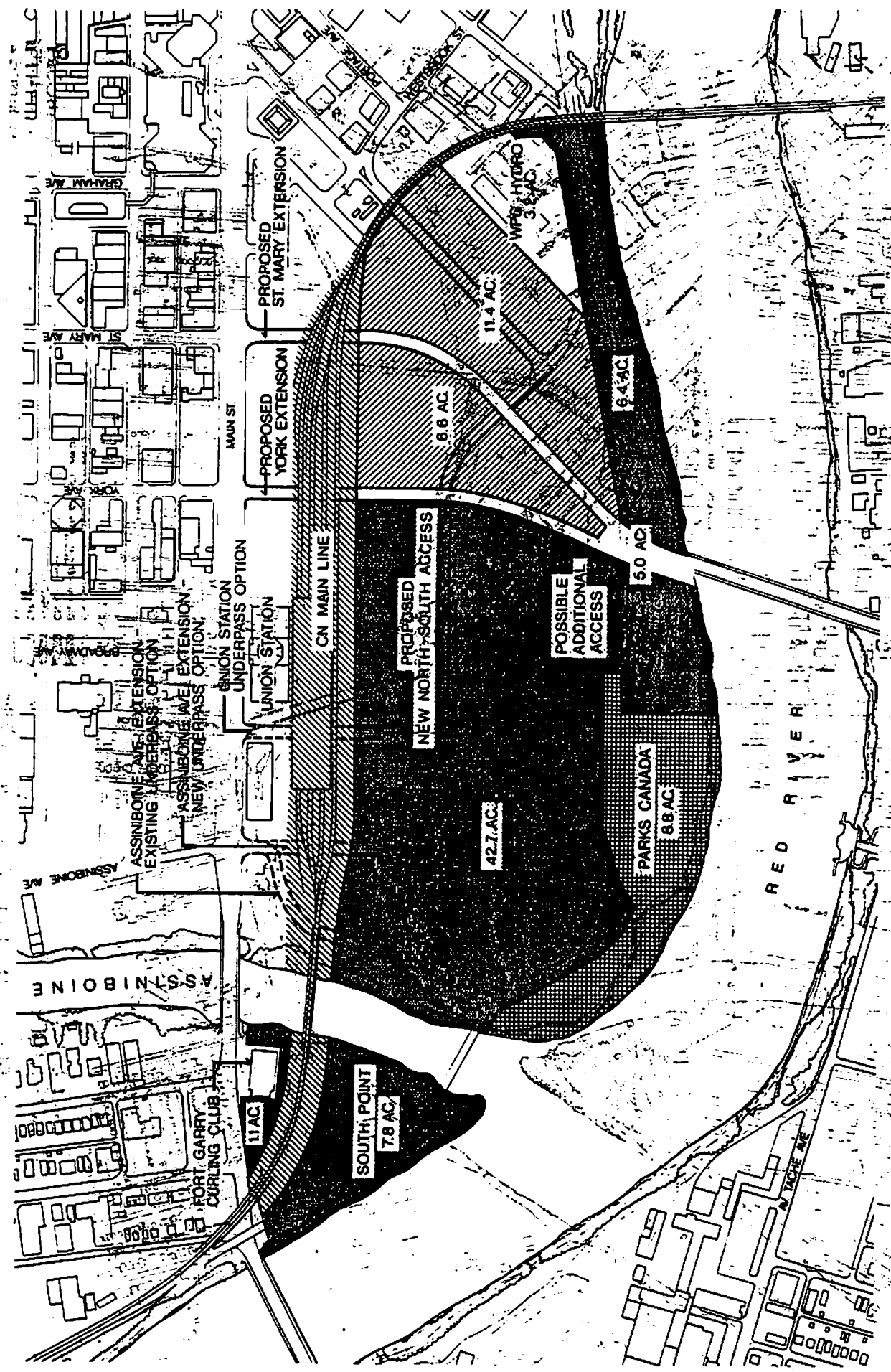
* Subject to search of CN Archives to confirm that the horizontal loading is distributed in a conventional manner and geotechnical testing to confirm the soil conditions, if it is found that stabilization of the excavation is not appropriate, it may be necessary to tie-back the piles and thus require costs well over \$1 million.



- PROPOSED CN RETAINED LANDS (18.0 AC)
- PROPOSED PUBLIC LANDS (58.0 AC)
- PARKS CANADA LANDS (8.8 AC)
- CN MAIN LINE

FIGURE 1/2

**EAST YARD TASK FORCE STUDY
FUTURE LAND OWNERSHIP AND ACCESS
OPTION A**



paragraph 2(d), and those portions of Figures 2 and 3 referred to in paragraph 2(d)(i), setting out the recommended locations of lands to be retained by CN and the new tri-level development agency; provided that adoption of the alternative location for CN's Retained Lands as shown in Figure 3 will require the mutual agreement of CN and the tri-level development agency.

paragraph 2(e), setting out the recommended mix of development components to be considered for inclusion in the first phase of the redevelopment over the next five years, provided that significant office projects will be developed on the public lands owned by the tri-level public development agency only with CN's approval.

paragraph 2(f) setting out the recommended planning parameters for the Redevelopment Area

c. the recommended zoning for the Redevelopment Area as set out in paragraph 4.

2. CN will apply to the Canadian Transport Commission to cease operations in the railway yard and relocate them elsewhere; preparation of the land will begin as soon as property transfer documents are finalized; the agreed-upon schedule for clearing and relocation of CN activities commits CN to be completely clear of the lands by December 15, 1988, provided that the property transfer documents are finalized in the spring of 1987. Specific provisions exist to enable the following to occur after the property transfer arrangements are executed:

- a. transfer of B & B building and Johnson Terminal after 30 days notice from tri-level development agency
- b. transfer of Stable A Building after 90 days notice
- c. transfer of Stable B Building (Training Centre) after six months notice
- d. transfer of the Transfer Bridge (most easterly rail bridge over Assiniboine River), after removal of rails therein, upon closure of the steam plant
- e. closure and clearing of all rail activities other than delivery of coal to the steam plant (including clearing of sheds; the concrete platform, and the relevant rails) to occur within 9 months following execution of the property transfer arrangements
- f. removal of steam plant and all related trackage by December 15, 1988

3. a precondition for finalizing the property transfer arrangements between CN and the City of Winnipeg is the initiation by the City of appropriate steps in order that this area be zoned in a manner that enables CN and the Metropolitan Corporation of Greater Winnipeg to proceed to develop their future lands in this area in accordance with the Concept Plan as approved in the MOU (or such amended Plan as is subsequently agreed upon); in addition, arrangements are to be finalized with CN, the City and the Province of Manitoba to withdraw or amend those rights and obligations on the existing Agreement between CN and the Metropolitan Corporation of Greater Winnipeg dated May 1968 which was approved by the Province of Manitoba.

1.3 ZONING OF THE DEVELOPMENT AREA

The December 1986 Task Force Report (section 6) reviews present zoning, recently proposed zoning and relevant zoning requirements for the East Yard development area. The Report commented upon the new downtown zoning by-law (July 1986 draft) being considered by the City of Winnipeg.

Subsequent to the Task Force Report, the City of Winnipeg has reviewed its proposed downtown zoning by-law and is finalizing a revised by-law which will be referred for public hearings during this spring. This revised by-law includes the following specific provisions for the East Yard area:

1. a division of the area into only two sub-areas, namely a riverbank area and a non-riverbank area (without any distinction between CN's retained lands and other lands); the riverbank sub-area is expected to reflect the Board of Commissioners' policy for "land requirement criteria for lined riverbank parks" as adopted in 1977

2. the proposed zoning for the riverbank sub-area corresponds to the July 1986 draft by-law; all non-park uses are conditional

3. the proposed zoning for the non-riverbank sub-area provides for the following:

a. residential apartment or hotel development is a conditional rather than a permitted principal or secondary use

b. a separate non-residential use group is established for this area, allowing as permitted principal uses a wide range of non-residential uses, including restaurant, office, wholesale business, many personal services, studio, theatre,

certain types of light industrial activity, and retail (provided that such retail is on the first and second storeys and includes not more than four retail businesses as principal uses in any one building or structure)

c. more than four retail businesses may be established in any one building or structure as a conditional use

d. bulk restrictions specify that buildings cannot be less than two storeys in height or have a Floor Area Ratio (FAR) exceeding 5.00; a bonus provision applies, however, for the FAR where a weather-protected pedestrian system is established as an accessory use; no restriction applies as regards maximum building height

e. other zoning provisions include the "P/L1", "S3" and "PL" designations as per the earlier draft by-law

It is understood that these amended zoning proposals are consistent with the December 1986 Task Force Report recommendations and the requirements of the CN/DRIE MOU pertaining to the land exchange.

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PART 2

OVERVIEW OF OTHER PROPOSALS AND EXPERIENCES

This section reviews two types of experience that are relevant in planning for the East Yard redevelopment:

1. Past East Yard Proposals

Since 1974, nine proposals, seven of which are now inactive, have been made regarding redevelopment of some or all of the East Yard. These proposals are examined to develop an understanding of the problems experienced by previous proponents in advancing redevelopment proposals and to help identify the nature and extent of development components that might be included or should be excluded in the East Yard Concept Plan.

2. Other Redevelopment Experiences

Examples of actual Canadian and United States experience with downtown or downtown waterfront redevelopment have been selected to gain an appreciation of the key elements and components for successful redevelopment.

2.1 PAST EAST YARD PROPOSALS

A two page summary of highlights is provided in Attachment A for each of the nine previous proposals or concepts identified for the East Yard since the early 1970s. For convenience, these are arranged as follows in chronological order:

- 1974: CN-Great West Life (Phase I) - Private Sector
- 1975: All Park Proposal - Public Sector (City)
- 1978: Oxford Plan - Private Sector
- 1979: Lakeview Plan - Private Sector
- 1979: CMHC Housing Plan - Public Sector
- 1980: A.R.C. Proposals (3 options) - Public Sector
- 1985: DRIE Plan - Public Sector
- 1986: Parks Canada Plan - Public Sector
- 1986: Draft Downtown Zoning Bylaw - Public Sector

Available documentation varies widely as between these proposals. A standardized format has been adopted for each proposal (one page of text and one page site plan description) to highlight scale, components and general orientation.

Review of these proposals suggests that the following noteworthy changes have occurred over the years:

PRIVATE/PUBLIC ORIENTATION

1. from private sector lead (mid- to late 1970s)
2. to public sector lead (mid-1980s)

COMPONENTS

1. from retail/office intensive (mid- to late 1970s)
2. to housing intensive and/or cultural/tourism (late 1970s to mid-1980s)

ORIENTATION OF SITE DEVELOPMENT

1. from lands in northern, western and central part of site, with private sector components as focal point (mid- to late 1970s)
2. to lands in the southern and eastern part of the site with river and site history as focal point (mid-1980s)

APPROACH TO RIVERFRONT

1. from passive riverfront development (mid- to late 1970s)
2. to intensive riverfront development (mid-1980s)

Review of past proposals for the East Yard also highlights the following:

1. Proposals for highly intensive commercial development on this vast site have created concerns related to detrimental market impacts on other parts of Winnipeg as well as possible overloading of existing street capacity. It is apparent, however, that existing services are adequate to accommodate intensive development of this area, particularly with the commitment to complete the York-St. Mary Avenues extension.
2. Proposals for a passive all-park concept have not been well received due to the low density of such use related to the public costs for development and operation; however, a limited riverfront park area has been included in many past proposals, and recent proposals have emphasized "hard edged" urban riverfront park areas.
3. Proposals for housing development have tended to receive more attention through time (see CMHC Plan, 1979); the 1986 draft downtown zoning bylaw prepared by the City reflected a desire to encourage such use in the precinct south of York along with a riverfront park.

4. Public amenity facilities (cultural, recreational, tourist-oriented) have received recent prominence with the Parks Canada project and the proposal for The Forks riverfront area set out in 1985 by federal authorities. The Task Force Project Authorization anticipated that the major redevelopment of an approximate 30 acre area at the junction of the rivers will be for recreational and institutional uses. These riverfront activities could be developed at various levels of intensity and could be compatible with various other uses in the central area of the public land area, including housing or other entertainment and recreation activities. One earlier plan (the Oxford Plan of 1978) included an arena located in the York-St. Mary "island" area.

The recent public sector proposals (starting with the A.R.C. studies in 1980) have tended to signify a common thrust to develop appropriate public activities on the riverfront areas. These proposals have been affected by the assumption (now no longer valid) that CN would retain the vast majority of the site, leaving the public sector to own and develop only the riverbank areas. The only proposal actually committed to proceed at present as set out here is the Parks Canada Plan (targeted for completion in the summer of 1988). The Task Force Report anticipates that the City will initiate appropriate steps in order that the entire East Yard site inside the highline be zoned, prior to the land transfer, on an integrated basis in a manner consistent with the recommended preliminary Concept Plan and site planning principles, and the requirements set out by CN for its retained lands. A new draft downtown zoning by-law is being issued for public hearings in the spring of 1987, and this by-law reflects the Task Force's recommendations.

2.2 OTHER REDEVELOPMENT EXPERIENCE

Numerous North American examples exist of downtown and downtown waterfront redevelopment in major cities. Two categories of examples were selected for consideration in this study:

1. Canadian experiences

These were used to help understand key elements and components of redevelopment and to gain an in-depth appreciation of the type of implementation mechanism that they used. The latter was an input to studies by the Task Force's legal consultants on the appropriate

implementation mechanism for the East Yard redevelopment. Four cases were selected for detailed review. The Winnipeg Core Area Initiative (CAI) and North of Portage redevelopment were selected because of their recent occurrence in Winnipeg, their use of tri-governmental involvement and the potential relevance of their implementing agency and implementation approach to East Yard redevelopment. Granville Island in Vancouver and Harbourfront in Toronto were selected because they were the best known examples of government-led downtown waterfront redevelopment in Canada.

2. United States experiences

These were used to help identify and understand leading components of highly regarded urban redevelopment programs in the United States. Background information on these experiences had already been presented in earlier work done by the North of Portage Administrative Task Force.^{1/} This work was referred to in order to extract highlights of relevance to the East Yard. Notable experiences covered by this earlier work include Faneuil Hall Marketplace in Boston, Harborplace in Baltimore, Pike Place Market in Seattle, the Kingdome in Seattle.

A recent ULI study has also been reviewed on urban waterfront redevelopments throughout North America,^{2/} including inland as well as coastal port areas. This study examines the history and characteristics as well as development opportunities, processes, issues and trends for such areas; specific case studies are provided for 12 projects, including Harbourfront in Toronto and False Creek in Vancouver.

A summary of each of the four Canadian cases is presented in Attachment B below, according to a standardized format. The format focuses on the implementation mechanism involved in each case and on noteworthy features of the history of the redevelopment.

Review of the Harbourfront experience in Toronto and Granville Island in Vancouver highlights the following lessons for a new development on downtown lands that were heretofore viewed as unattractive and inaccessible:

1. the need for a flexible plan, while emphasizing the need throughout for a "special" and "public" development;
2. direct attention at the local population rather than tourists;
3. public funding related to a capital program to establish the development; thereafter, continued operation must be on a self-sufficient basis; this implies joint private-public development; it also underlines the risks and difficulties of launching high

cost "programming" activities to attract visitors (as per Harbourfront) versus initial development of a self-sustaining successful traffic generator (the Granville public market);

4. need for staged development;
5. capability to retain wide range of uses, including industrial;
6. relevance of "festive"-type retailing.

Both Harbourfront and Granville Island emphasized cultural and artistic components, however, a similar thrust for East Yard might not be appropriate in light of Winnipeg's already-established artistic districts.

U.S. experience highlights the success of anchorless retail development containing food/entertainment, specialty and boutique items in a festival or theme environment, e.g., Faneuil Hall Marketplace in Boston, Harborplace in Baltimore, and Pike Place Market in Seattle. The Rouse Company defines a "festival retail marketplace" as including an array of specialty shops, kiosks, and pushcarts offering unique merchandise not normally found in department stores or other conventional retail outlets; in addition, a significant share of the retail space includes a variety of food operations that range from table-service restaurants to fast food stands, to stalls selling unusual food items for on-premises or at-home consumption. The orientation is toward impulse or recreational shopping and typically functions in an environment with significant natural amenities and a constellation of other activities bringing people to the site. It is recognized that such a retail concept is typically absent from most urban areas prior to a special successful redevelopment program; further, this activity can provide attractive financial returns within an overall redevelopment program located in areas which lack established commercial anchors. A festive retail concept as set out here is totally different from any other retail project currently in the Winnipeg market, and could attract patrons from throughout the residential market area as well as being a principal tourist attraction.

Downtown revitalization programs have also included professional sports facilities in a number of North American cities, e.g., Hamilton,

Toronto, Vancouver, Minneapolis, St. Paul, Hartford, Lexington, Tacoma, Seattle. Facilities such as an arena/sportsplex/dome stadium focus attention on the target area; however, they do not necessarily create a stimulus for significant additional development (with the possible exception of hotel accommodation and restaurants). Daytime activities, for example, are not typically stimulated; in addition, significant peak parking requirements are associated with such activities. A very large facility such as a dome stadium also typically requires a large number of professional activities to be viable, e.g., baseball and basketball along with hockey, football and other events. The one key feature of the East Yard that is relevant to such an approach is its extensive vacant land area located at the heart of the city.

Review of urban waterfront development projects in North America highlights the relevance of development entities which combine both public and private interests, starting at an early stage of the pre-development process. Site characteristics merit careful attention in order to appreciate key opportunities and constraints: these include relevant geographic factors (water, land and climate resources), anticipated local users (potential conflicts and compatibilities), waterfront heritage, site access (physical and psychological barriers), visual characteristics, the impact of local rail activities (a typical feature of urban waterfront areas), and relevant joint jurisdictional issues. Successful development opportunities have frequently focused on mixed-use programs including major urban recreational, festive retail, historical/cultural, and residential elements. Innovative zoning measures have often been adopted to reflect special waterfront area circumstances. Overall planning of urban waterfront projects has also emphasized the importance of financial issues -- including identification of the optimum lead projects and careful assessment of post-development operation and maintenance requirements.

^{1/}North Portage Administrative Task Force, Technical Report, July 1983 (p.45-49).

^{2/}D. M. Wrenn, et.al. Urban Waterfront Development, Urban Land Institute, Washington, D.C., 1983.

PART 3

BACKGROUND INFORMATION ON THE EAST YARD

To support its planning efforts, the Task Force developed considerable background information about the current and likely future characteristics of the East Yard and its surrounding environment. Much of this information is already covered in the Task Force's report. Additional background information not presented in the Task Force report appears in this section under the following categories:

1. Composite Site Analysis
2. Environmental Considerations
3. Existing Major Buildings
4. Adjacent Land Owners
5. Historical Considerations.

3.1 COMPOSITE SITE ANALYSIS

The following are provided to highlight key features of the site:

Table 3-1 - General Site Features

- review of major constraints and related opportunities for the East Yard

Figure 3-1 - Site Determinants: Urban Linkages

- key urban linkages

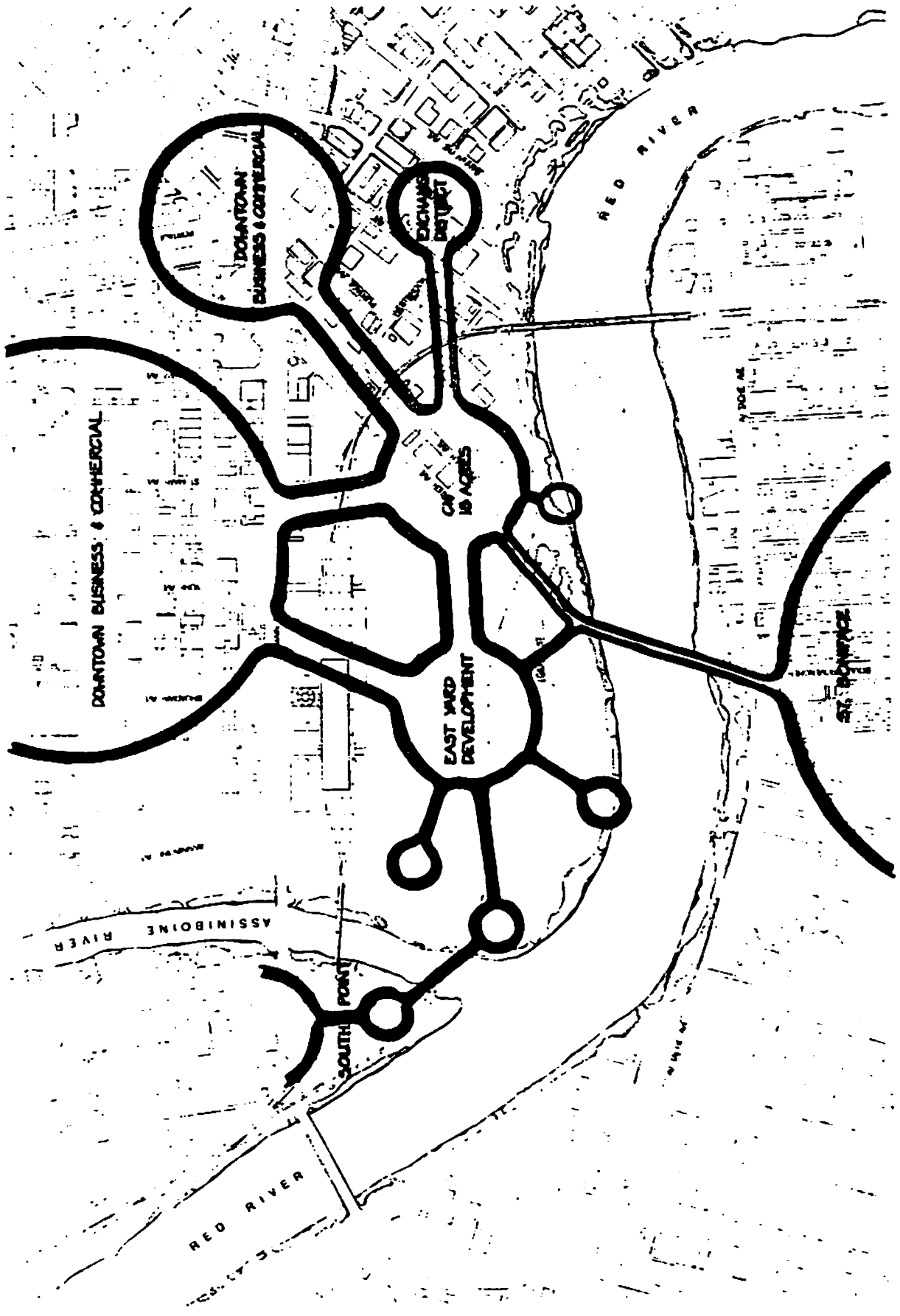
Figure 3-2 - Composite Site Analysis

- synthesis of all major site-related planning determinants
- the river (and its flood plain boundaries and adjacent parks) along with the railway main line (elevated berm) emerge as two key determinants
- site access points are emphasized, particularly the proposed York-St. Mary extension
- environmental factors (sun and wind patterns primarily) also are emphasized for year-round use (see Section 3.2)
- existing structures off-site are identified where relevant (e.g., Union Station, St. Boniface Basilica, Portage and Main) along with bridges (including the rail bridge to be abandoned)

TABLE 3-1

GENERAL SITE FEATURES OF EAST YARD

Constraints	Opportunities
- large site size relative to Winnipeg market	- ready assembly of large site
- current and past rail yard use	- unique scenic/historic features
- limited public exposure/private ownership	- public interest/public ownership
- isolation/rail line berm/noise	- central area location/distinctive neighbourhood feature
- vehicle access constraint	- adjacent car, bus, rail access and capacity; proceed with extension
- Main Street	
- York/St. Mary extension	
- rail function relocation	- minimum non-rail relocation
- off-site steam power plant	- planned closure off-site power
- on-site steam plant	- planned closure on-site steam
- new infrastructure and riverbank requirements	- municipal service capacity/Parks Canada project
- absence of commercial anchors and services (on- and off-site)	- new activities (parks, Parks Canada, VIA, CN, etc.)
- potential threat to projects and programs in other areas	- opportunity for distinctive activities attractive to broad City/Province community

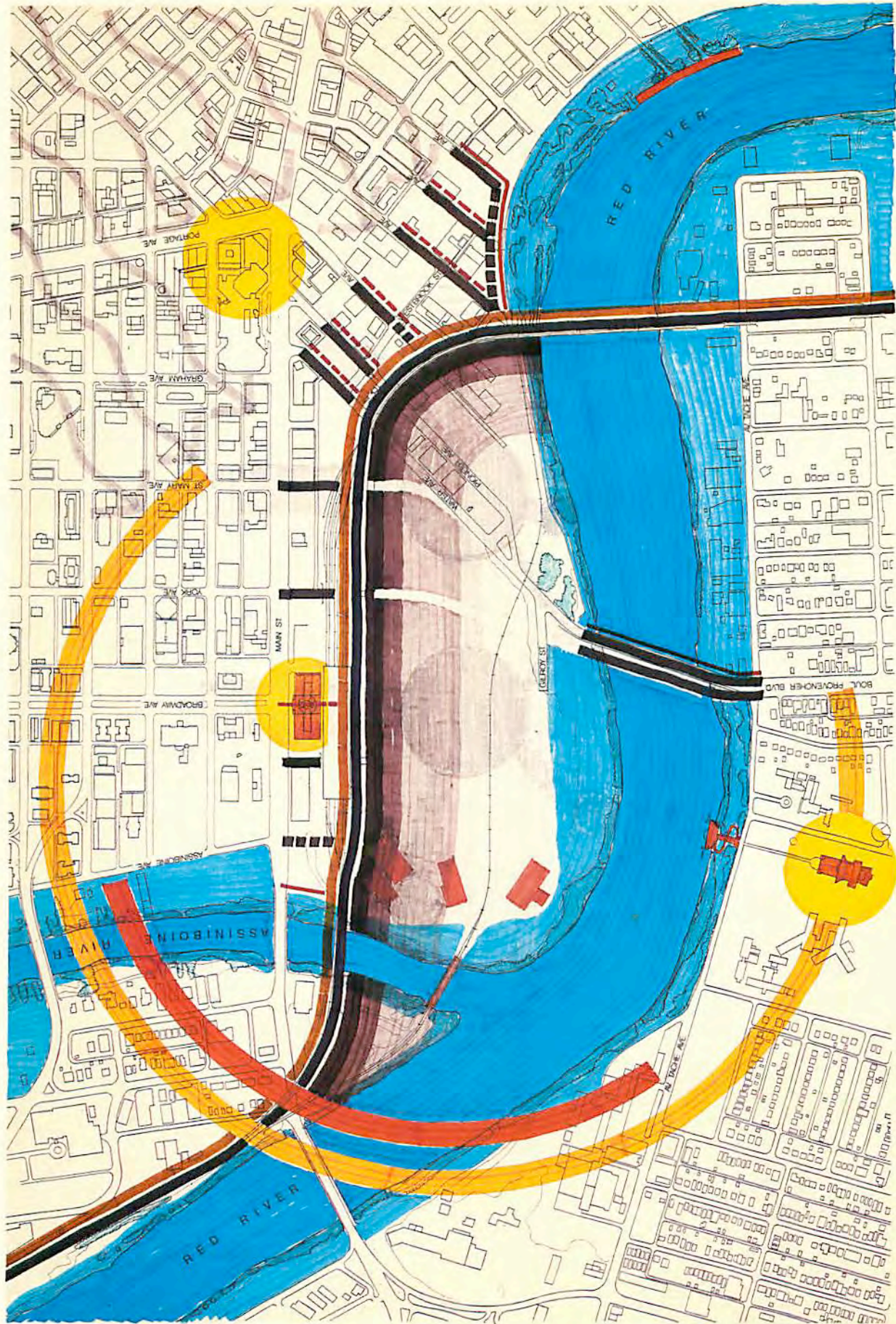


GABOURY ASSOCIATES ARCHITECTS

SCALE 1" = 30'

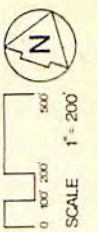
EAST YARD TASK FORCE STUDY
 AREA PLAN - SITE DETERMINANTS: URBAN LINKAGES

FIGURE 3-1



**EAST YARD TASK FORCE STUDY
AREA PLAN – COMPOSITE SITE ANALYSIS**

- SUMMER SUN
- WINTER SUN
- WINTER WIND
- VEGETATION
- VIEWS
- SUMMER WATER LEVEL
- 60 YEAR FLOOD PLAN (INCLUDES INVERSIDE PARK SYSTEM)
- NOISE LEVEL GRADIENT
- SIGNIFICANT STRUCTURES
- URBAN LINKAGES (CIRCLES)
- ROAD ACCESS
- PEDESTRIAN ACCESS
- RAIL LINE
- TRANSIT CORRIDOR



GABOURY ASSOCIATES ARCHITECTS INC

FIGURE 3.2

6. Sunlight conditions. The daily movement of the sun from east to west and the changing daylight hours from season to season, particularly in summer versus winter (see Figure 3-2).

3.2 ENVIRONMENTAL CONSIDERATIONS

The past and continuing presence of railway operations and the proximity to two major rivers give the East Yard some distinctive environmental features which can significantly affect the type of redevelopment that is appropriate for various locations and the cost of proposed redevelopment schemes. The following are key environmental site determinants in the East Yard:

1. Soil conditions, in particular, the level of cinder landfill. The East Yard has been used as a repository for coal ashes (cinders) from the East Yard power plant, and in the past from coal powered trains. (Results of a preliminary soils investigation conducted throughout the site are presented in Attachment C; these tests have not indicated any special concerns about pollutants -- in addition, the depth of cinders and other man-made fill is less than 4 feet in most areas, and less than 1.5 feet in many instances.)
2. Riverbank stability along the Red and Assiniboine Rivers. Unstable conditions including earth slippage are known to occur at many locations along the East Yard shorelines with the most serious problems on the Assiniboine River between the main line and the transfer track. (Attachment D contains additional information on bank stabilization requirements.)
3. Noise from trains using the main line, particularly the screeching sound that occurs as the train negotiates curves or brakes to a stop. (See Attachment E for information on train noise impacts.)
4. Flooding in spring caused by high levels of the Red and Assiniboine Rivers. A sizeable portion of the East Yard in the vicinity of the shoreline is susceptible to flooding (the flood area marked in Figure 3-2 indicates occurrences coming once in 160 years).
5. Wind conditions. The East Yard is subject to the prevailing winter winds from the west-northwest although some protection is provided by the berm of the main line (see Figure 3-2).

6. Sunlight conditions. The daily movement of the sun from east to west and the changing daylight hours from season to season, particularly in summer versus winter (see Figure 3-2).

3.3 EXISTING MAJOR BUILDINGS

The four major buildings located on the southern portion of the main part of the East Yard, i.e., the B & B Building, Johnson Terminal Building, Storage Building and Training Centre (see Figure 3-3 for location) have generated considerable interest as possible candidates for renovation and reuse. To evaluate the prospects for future use of these buildings, a preliminary structural and architectural assessment of each was carried out in July, 1986 by Crosier, Kilgour & Partners Ltd. and Gaboury Associates Architects. The assessment was based on a walk-through of each of the buildings.

Key features of each building and a summary of the preliminary assessments are presented in Table 3-2. The assessments indicate that the Storage Building and Training Centre are best suited to renovation and reuse. They require normal upgrading to extend their usefulness and are well suited to uses that would involve public gatherings. They can be renovated at lower cost than building new space. The Johnson Terminal would cost about the same as new space per square foot to renovate, however, its use would be limited to enclosed space functions, e.g., apartments, offices, restaurants. The B & B Building, although the oldest and most historically significant of the buildings, is the least satisfactory to renovate and reuse. It would require major upgrading and is only suited to very limited applications, with a rail museum being the most appropriate use. The cost of renovation per square foot is much higher than for the other buildings.

Additional details contained in the structural and architectural assessments of each building are presented in Attachment F.

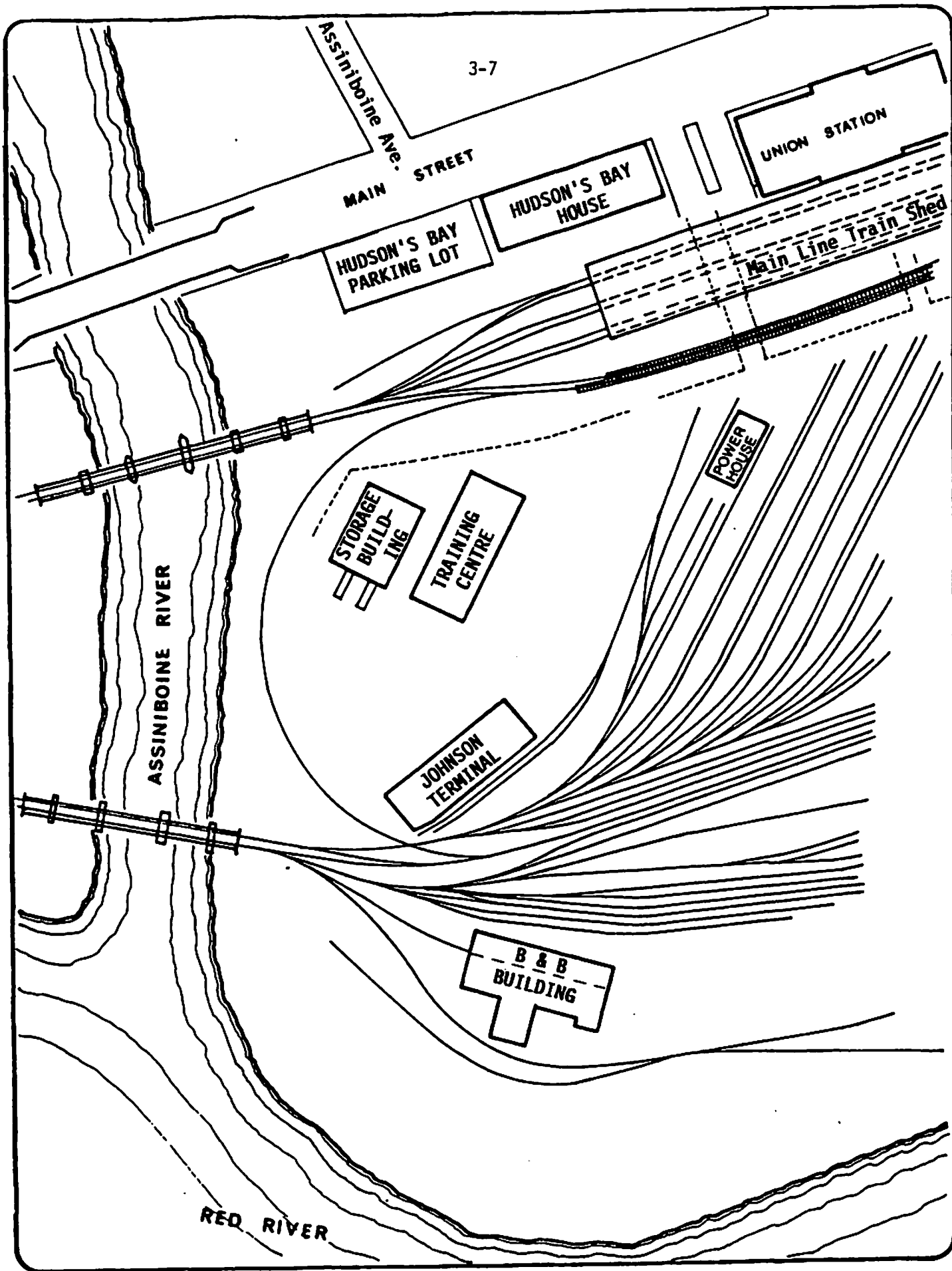


FIGURE 3-3

LOCATION OF MAJOR BUILDINGS

TABLE 3-2
KEY DATA ON FOUR MAJOR BUILDINGS ON SOUTH END OF CN EAST YARD

	Training Centre	Storage Building	Johnson Terminal	B & B Building
Year Built	1909	1910	1928-1930	1889
Number of Storeys	2	2	4 + basement	1
Square Feet	46,000	28,000	106,875	28,800
Structural Condition	-reasonably good, need normal upgrading to extend life	-reasonably good, need normal upgrading to extend life -previous structural changes should be assessed	-good	-poor, requires major upgrading
Reuse Potential	-reasonably good space is suited to public gathering functions -needs retrofitting	-reasonably good, space is suited to public gathering functions -needs retrofitting	-reasonably good, space not suited to public gathering function; better for enclosed space functions, e.g., apartments, restaurants, office -needs retrofitting	-very limited, rail-road museum most appropriate reuse -most of building would have to be rebuilt -needs retrofitting
Cost of Renovation (reasonable target)	\$55/sq.ft.	\$60/sq.ft.	\$70/sq.ft.	\$120/sq.ft.
Features of Site Location	-furthest from riverfront, near main line	-some distance from riverfront, near main line	-some distance from riverfront and main line, central to south end	-furthest from main line, closest to riverfront, outside flood lines
Present Use	-fitness centre, training centre	-storage, CN Police	-vacant	-train maintenance storage -soon to be abandoned

3.4 ADJACENT LAND OWNERS

In addition to CN Rail (the main line), CN Real Estate (the 18 acres of retained lands), Parks Canada and the City, it is important to note the following adjacent land owners:

VIA Rail

- provides rail passenger service that travels over CN main line
- in October, 1986, assumed ownership from CN of various rail-related facilities near East Yard including Union Station, main line train shed (see Figure 3-3) and the parking lot beside Union Station. Also, has easements for ingress and egress at various locations on or near the main line, including the rail access ramps and the loading platform
- must be consulted about any East Yard project occurring near the main line (between York Avenue and Assiniboine River)
- supports redevelopment of the East Yard; Union Station provides key historic building as potential major pedestrian gateway to the East Yard site
- Union Station is expected to be vacated by CN in the next few years making available up to 100,000 square feet of space. Major refurbishing required within 5 to 10 years to make the space leasable. VIA hopes East Yard redevelopment will assist in attracting commercial activity to the area and make refurbishing of vacated space viable. VIA would welcome development of a multi-modal (e.g., inter-city bus and rail) facility adjacent to the Union Station (VIA has had a recent successful development of this type of project in Quebec City). A Canada-Manitoba study completed in April 1986 concluded that such a multi-modal could be developed using the Union Station at a cost of \$23 million (excluding land); annual passengers would approximate 1.3 million today (rail portion only 174,000).

Hudson's Bay Company (Northern Stores)

- owns lands adjoining Main Street from just south of Union Station to the Assiniboine River
- properties include Hudson's Bay House, an adjacent 150 space parking lot to the south and a lane behind these structures (see Figure 3-3) (parking is a key requirement for the HBC office)

- parking lot directly across from Assiniboine Avenue; must be removed if new road access to the East Yard involves an extension of Assiniboine Avenue. Alternative parking would have to be provided before Hudson's Bay would give up parking lot
- Hudson's Bay is prepared to give up its lands near the Assiniboine River to the public sector for a park or other publicly oriented development
- opportunity may exist to integrate rich heritage of Hudson's Bay Company with historically oriented developments in the East Yard.

Fort Garry Curling Club

- own and operate Fort Garry curling rink located on the north side of the South Point near Main Street
- membership traditionally comprised of a large portion of CN employees
- curling rink site is only part of South Point not to be transferred to the new Development Corporation. It is a pivotal location for access to South Point from Main Street; in the short term, it could provide summer parking access to the South Point
- the City will require the Fort Garry Curling Club property for the Main/Norwood bridge development, i.e., new bridges to the east of both the Norwood and Main Street bridges to accommodate northbound traffic (the existing bridges would be used for southbound traffic); the earliest that the Curling Club property would be required is 1991 -- however, it may be decided initially to undertake rehabilitative work to the decks of the existing bridges (thereby delaying acquisition of the Curling Club property for approximately 10 to 15 years); a decision by the City on this matter cannot occur until the completion of further engineering investigations during the 1987 construction season.

3.5 HISTORICAL CONSIDERATIONS

The junction of the Red and Assiniboine Rivers ("The Forks") is acknowledged to be a place of national historic significance due to its role as a rendezvous, settlement and transportation centre in the opening of the Canadian West. This area also offers opportunities to highlight earlier native and prehistoric activities in this area.

Attachment G provides an outline of the past activities relevant to this site, including:

- prehistoric activities, including early human occupation in this area starting about 11,000 years ago, and subsequent native encampment
- historic activities associated with the fur trade and early European settlement before 1870
 - early trading or wintering posts (1730s to early 1800s)
 - Northwest Company forts and rivalry with the Hudson's Bay Company (1810-21)
 - headquarters of metis buffalo hunt
 - Lord Selkirk's settlement (1812-1834)
 - HBC development of Upper Fort Garry as headquarters (1835)
 - structures developed near The Forks, including the earlier St. Boniface churches across the Red River
 - steamboat traffic with the United States
- historic activities associated with Canadian development after Manitoba becomes a province in the Dominion of Canada (1870):
 - early immigrant shelters (1870s)
 - demolition of Upper Fort Garry (1882)
 - bridges crossing Assiniboine River at Main Street, and the Red River between Broadway and Provencher (1884)
 - initial railway development at The Forks (1888-89), including the eastern rail bridge over the Assiniboine River and the B and B Building; subsequent development of Fort Garry Park
 - construction of major St. Boniface cathedral (1904-05)
 - Union Station and other major rail facility expansion in East Yard area (1908-1912), including three freight sheds and two stables
 - Johnson Terminal building warehouse (1928-30)
 - development of building products and coal yard activities as well as various structures (including additional residences) in the northern part of the East Yard area.

The historic significance of The Forks has been formally recognized for more than 60 years, and has received special attention in recent years

- first recognized in 1925 as a significant resource by the Historic Sites and Monuments Board
- in 1974, the Board again considered the Forks as a "place" of National Historic significance, noting that irrespective of its structural resources from various historic periods, it is the junction itself, physically and symbolically, which is the historic resource and which should be preserved and protected

- in 1978, the Forks was included within the Canada-Manitoba Agreement for Recreation and Conservation on the Red River Corridor (A.R.C.), which has subsequently led to the initiation of the preparation of a master development strategy for a portion of The Forks site to be owned and developed by Parks Canada
- in 1986, 9 acres of East Yard land adjoining the Red River near the confluence of the Red and Assiniboine Rivers was transferred to Parks Canada to develop a National Historic park. Parks Canada has prepared a plan for this site ("The Forks" Site Development Plan) and the new historic park is projected to open in the middle of 1988 (see Attachment A, pages A-21, 22).

Known physical historic resources still existing on or near The Forks are extremely limited due to changes over time, flooding, original construction materials, alterations to land use and more recent major intervention by railway development. (See Attachment G's review of structures built since 1870; also see Attachment F.) Archaeological investigations were conducted in the summer of 1984 on the Parks Canada site; these identified what are believed to be remains of partial footings from portions of Fort Gibraltar I and Fort Gibraltar II, as well as the partial foundation wall for the Manitoba Engine House and Roundhouse associated with the B & B building. It has been concluded to date that restoration or reconstruction of historic resources at The Forks will not likely be possible or practical, aside from possible partial or complete restoration of the Northern Pacific and Manitoba Engine House and Roundhouse and Upper Fort Garry, as well as appropriate renovation and redevelopment of Union Station; it is noted, however, that considerable interest also exists in conducting additional archaeological investigations in this area.

The Heritage Resources Act of 1985 has established certain regulatory requirements affecting future development in the East Yard area. This Act is administered by the Historic Resources Branch of the Manitoba Department of Culture, Heritage and Recreation, and is intended to reduce the prospect of late discovery or possible destruction of heritage resources at land development sites. "Heritage resources" are defined in the Act as works of native or human endeavour that have prehistorical, historical, cultural, natural, scientific or aesthetic value. Discussion with officials

of the Historic Resources Branch confirms that redevelopment of the East Yard area is considered to be a prime candidate for application of the Act, and that heritage resource impact assessments may be required prior to proceeding with specific developments involving excavation below the cinder or fill layers associated with previous rail yard use. Accordingly, it is anticipated that the new public development agency will establish mechanisms for ongoing discussion and review with the Historic Resources Branch.

Considerable interest has been noted to develop historically related projects in the East Yard, including historic interpretive facilities, a native museum, a rail museum, a son et lumiere facility, archaeological digs, restoration of certain facilities, and the possible adoption of an overall historic theme for the entire East Yard area redevelopment.

The Prairie Regional Office of Parks Canada has prepared an historical interpretive plan framework to guide subsequent development in this area. The central historical theme suggested for the National Historic Park is "The Red/Assiniboine Junction and the Transformation of the Canadian West". Eight historical sub-themes have also been identified and prioritized (see Figure 3-4), along with site resources that could be utilized to interpret each theme and potential complementarity with other existing historical resources outside The Forks.

Parks Canada stated that it would be prepared to participate in interpretive programming in any visitor centre to be installed as a component of subsequent East Yard development. Parks Canada's space in such a facility would be used for comprehensive theme treatments through use of displays and audio-visual means; also, use could be extended to comprehensive orientation to other related Parks Canada parks and sites in the west and north. In the event that delays occur in completion of the facility, it was suggested that a temporary facility might be considered as an interim orientation measure.

Five major events have been envisaged by Parks Canada for possible site programming:

1. Fur Trade Pageant (summer)
2. Birth of Province - play(s) or a series of dramatic re-enactments or vignettes of events prior to and during the 1870 Resistance (summer)
3. Children's Festival - variety of activities targeted at children in the elementary school level (near end of school year)
4. Ethnic Pageant - could be component of Folklorama
5. Winter Festival - outdoor period activities.

Major audio-visual presentations in the Visitor Orientation Centre are suggested for the following sub-themes (as well as the Central Theme):

- Canadian-English Fur Trade
- The Hudson's Bay Company and the Struggle for Provincial Status
- Winnipeg and the Junction: A Metropolis in the Making: 1870-1887 (also include model display).

The B & B Building has been noted by various groups as a possible facility for a railway museum that might proceed with the involvement of special interest groups, such as the Midwest Rail Association and Vintage Locomotive Society. Parks Canada could be involved with associated interpretive panels.

The South Point has been suggested by Parks Canada as an area to concentrate the treatment of the following themes -- Indian-Euro-Canadian Contact: The French Period, 1734-1760. The HSMB plaque commemorating La Verendrye (currently located in Bonnycastle Park) might be relocated there; in addition, the on-site treatment could consist of an interpretive display panel augmented (at least initially) by archaeological investigations.

FIGURE 3-4
THE FORKS: THEME-RESOURCE RELATIONSHIPS

THEME	RELATED ON-SITE RESOURCES	REGIONAL/NATIONAL REPRESENTATION OF THEME THROUGH EXISTING COMMEMORATION PROGRAMS
<p><u>Second Priority Themes</u></p> <p>A. The Junction and Pre-Contact Aboriginal Trading System</p>	<ul style="list-style-type: none"> - The 1984 Archaeological program identified resources related to fishing and fish preparation from both the pre and post-contact period. - Research has identified major native encampments at the forks site but no extensive archaeological investigation has taken place to determine exact locations. - The location of Fort Rouge is not known and highly conjectural. 	<ul style="list-style-type: none"> - Parks Canada has not commemorated this theme at all in Western Canada. - The ARC Lockport Archaeological site presents a major commemoration of this theme at its interpretive centre. - The Manitoba Museum of Man and Nature devotes a gallery to Pre-contact Manitoba history.
<p>B. Indian-Euro Canadian Contact: The French Period 1734-1760</p>	<ul style="list-style-type: none"> - Archaeological remains of Fort Garry I, may be on the proposed Parks Canada site - structural remains have been located which are probably associated with this fort, which research indicated was superimposed on the site of Fort Gibraltar II. 	<ul style="list-style-type: none"> - This theme is not interpreted at any designated national historic park or site outside plaques monuments associated with La Vérendrye (HSMB plaque located in Bonnycastle Park)
<p>D. The H.B.C. and the Northwest: The Junction emerges as a settlement Centre; 1821-1850</p>	<ul style="list-style-type: none"> - The location of Fort Rouge is not known and highly conjectural. - Archaeological remains of Fort Garry I, may be on the proposed Parks Canada site - structural remains have been located which are probably associated with this fort, which research indicated was superimposed on the site of Fort Gibraltar II. 	<ul style="list-style-type: none"> - This theme receives minor interpretation at Museum of Man and Nature and at Promenade Tache, the St. Boniface ARC project.
<p>H. The Junction and the Immigrant Experience</p>	<ul style="list-style-type: none"> - The Immigration sheds from the 1870's era may have been on the proposed Parks Canada site but their exact location has not been determined. For the later Immigration period, Union Station may have had facilities for processing new Canadians. 	<ul style="list-style-type: none"> - This theme is very well represented at Lower Fort Garry and at other regional sites such as St. Andrew's Rectory, Ross House and the recently completed William Kennedy House on River Road. - The Provincial Museum of Man and Nature interprets the immigrant experience in its galleries but focuses on the 1896-1914 era. - Smaller, local museums such as those at Steinbach and Gimli interpret their particular ethnic groups' arrival. The Jewish experience has been very professionally interpreted by the local Jewish Historical Society.

FIGURE 3-4

THE FORKS: THEME-RESOURCE RELATIONSHIPS

THEME	RELATED SITE RESOURCES	REGIONAL/NATIONAL REPRESENTATION OF THEME THROUGH EXISTING COOPERATION PROGRAMS
<p><u>Top Priority Themes</u></p> <p>C. Canadian-English fur trade rivalry and Continental Expansion: 1760-1821</p>	<p>- Archaeological remains of Forts Gibraltar I & II. No extensive resource identification has taken place</p>	<ul style="list-style-type: none"> - Theme treated in minor way in Lower Fort Garry VRC - Forts Rouge, Garry and Gibraltar commemorated at ARC project at Upper Fort Garry Gate. - Major provincial commemoration is Ontario's Fort William - Same theme identified by ISRB for commemoration at Cumberland House, Fort Chipewyan, Fort Prince of Wales, York Factory.
<p>E. The Hudson's Bay Company and the struggle for Provincial status: 1850-1870</p>	<p>There are no extant or non-extant physical resources representative of this theme at the proposed Parks Canada Forks site</p>	<ul style="list-style-type: none"> - This theme is given peripheral attention at federal historic sites such as Lower Fort Garry, Riel House and St. Andrew's Rectory. - The theme is given minor interpretive coverage at the Museum of Man and Nature and at the independent St. Boniface Museum.
<p>F. Winnipeg and the Junction: A Metropolis in the Making: 1870-1887</p>	<p>- There are no identified extant or non-extant resources representative of this theme at the proposed Parks Canada Forks Site. On adjacent property may be found relevant archaeological resources such as farm buildings, warehouses and a major H.B.C. mill.</p>	<ul style="list-style-type: none"> - The only surviving physical resource in the area pertinent to this theme is the north gate of Upper Fort Garry which has an outdoor display covering some aspects of this theme. - The Museum of Man and Nature has a major urban gallery but it concentrates on the 1896-1914 period. - The historical development of urban centres is not well represented in the Parks Canada system in Western Canada.
<p>G. The Junction and the Advent of the Railway: 1888-1923</p>	<p>The 1889 Northern Pacific and Manitoba Engine House⁴⁴ is the major representative historic resource but it is not on Parks Canada's proposed site. The archaeological remains of the original engine house turnabout may be on Parks Canada property.</p>	<ul style="list-style-type: none"> - Federal commemoration of the railway theme does not extend beyond plaques at Union Station and Miami, Manitoba - The Museum of Man and Nature interprets the railway theme but focuses on the CPR. - The Winnipeg-based Midwestern Rail Association operates a small railway museum at Miami.

⁴⁴NOTE: The theme lettering corresponds to that used in the Themes and Objectives document for the Forks.

** referred to as B & B Shop on figure 3-3.

PART 4

SITE AND DEVELOPMENT PLANNING INVESTIGATION

A major part of the Task Force work involved identifying and assessing conceptual site plans for the East Yard and components for site development. Notable items are discussed under the following headings:

1. Conceptual Framework for Site/Development Planning
2. Development Possibilities, with particular emphasis on Tourism/Entertainment Attractions
3. Development Focus
4. Review of Three Development Plan Options.

4.1 CONCEPTUAL FRAMEWORK FOR SITE/DEVELOPMENT PLANNING

On the basis of a comprehensive analysis of site characteristics, with particular emphasis on the Composite Site Analysis, a visual Conceptual Framework for East Yard site planning was prepared. This framework (see Figure 4-1) is similar to a land use diagram except that its purpose is to provide planning direction and describe the "intent" of proposed uses and developments.

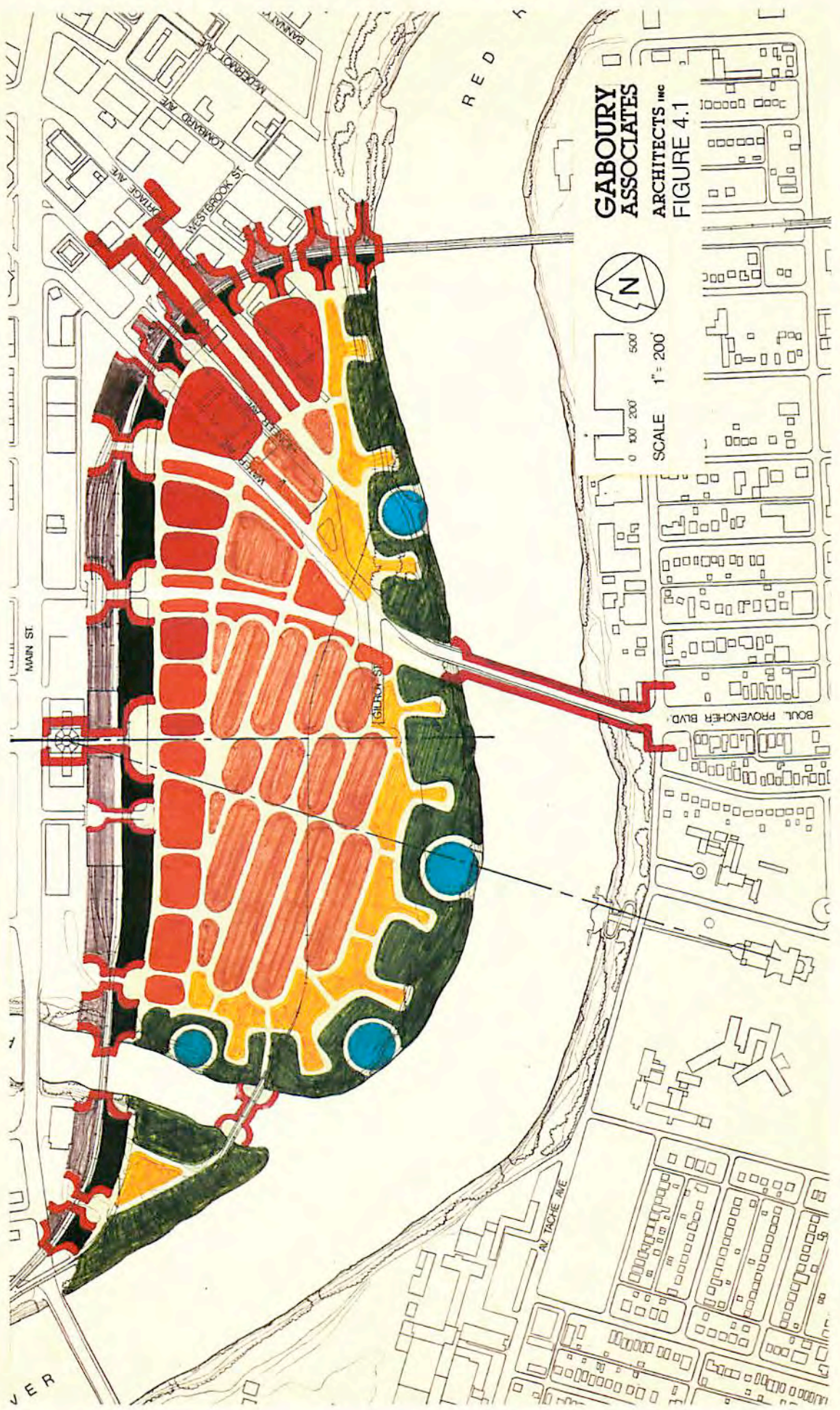
It can be used both to guide the preparation and to evaluate the appropriateness of more detailed site plans and specific development plans. In principle, site plans should be consistent with the conceptual framework. Significant deviations would suggest inadequate consideration of key site constraints and opportunities.

The Conceptual Framework diagram identifies nine zones of intent for development and use of the East Yard site. Potential types of development are either described by their names or by the following three descriptions:

1. **Buffer Zone Activities**
 - appropriate use - parking, non-polluting industrial developments
 - inappropriate use - outdoor recreation
2. **High Density Urban Fabric**
 - appropriate use - high rise office and commercial development

EAST YARD TASK FORCE STUDY AREA PLAN - CONCEPTUAL FRAMEWORK

- SITE PORTALS / GATEWAYS
- RIVER ORIENTED ZONE
- RIVER PARK DEVELOPMENT
- WATER RELATED ACTIVITIES
- PUBLIC SPACE NETWORK
- SITE EDGE TREATMENT
- BUFFER ZONE ACTIVITIES
- HIGH DENSITY URBAN FABRIC
- INTERIOR SITE FUNCTIONS



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FIGURE 4.1

- inappropriate use - low level office and commercial development, housing

3. **Interior Site Functions**

- appropriate use - integrated indoor leisure and recreation activities, medium-rise housing
- inappropriate use - high rise office and commercial development.

To be fully appreciated, the Conceptual Framework should be considered in conjunction with the Site Planning Principles contained in the Task Force report.

4.2 **DEVELOPMENT POSSIBILITIES**

Redevelopment of the East Yard requires a mix of uses to accommodate the relatively large area of land involved and the diversity of development environments that occur there.

Table 4-1 presents an overview of various public sector and private sector development possibilities considered for the East Yard, classified by major functional groups (historic/cultural, sports/leisure, commercial, etc.) and by public versus possible private sector developers as participants. Analysis indicated that the most promising possibilities for the lands to be owned by the public body would be:

<u>Private Sector</u>	<u>Private/Public Sector</u>	<u>Public Sector</u>
Water Amusement Area	Farmers'/Public Market	Historic Interpretive Centre
Housing (apartments)	Ethnic/Heritage Centre	Tourism Orientation Centre
Urban Resort Hotel	Marina	Son et Lumiere
Festive Retail	Parking	Conservatory/Parks
Ancillary Retail	Fitness Centre/Pool	

The East Yard is a very appealing location for major tourism and entertainment attractions. The Task Force reviewed available information identifying and assessing the types of attractions that might be located in the East Yard. Some background information developed for this purpose is presented in Attachment H:

1. review of a Winnipeg tourism market survey conducted in 1985. This survey was part of the Winnipeg Tourism Development Study that evaluated 10 potential major attractions at different locations in the city, including the East Yard

TABLE 4-1

PUBLIC AND PRIVATE SECTOR DEVELOPMENT POSSIBILITIES IN EAST YARD

Public Sector	Private Sector
Historic/Cultural/Educational Attractions	
Historic Interpretive Centre	
Transport Oriented Museum	
Son et Lumiere Display	
Multicultural Facility	
Tourism Orientation Centre	
Children's Museum	
Science Centre	
Arts/Music Park	
Amphitheatre	
Flower Garden/Conservatory	
Historic Pageant	
Ethnic Pageant	
Sports/Leisure Attractions	
Arena	Water Amusement Area
Dome Stadium	Children's Village
Winter Sports Amusement Area	Midway Rides
Multipurpose Outdoor Play Area	
Docking Areas - Tour Boats, Water Taxis Marina	
Bicycle Paths	
Promenade	
Fitness Centre/Pool	
Commercial Attractions	
Farmers' Market	
Public Market	
	Antique/Flea Market
	Festival Retail
	Ethnic Restaurant Village
	Restaurants/Bars
	Hotel
Housing	
	Market
	- high rise
	- low to medium rise
	(1) oriented to households without children
	(2) oriented to seniors, pre-seniors
Retail	
	Festival Retail
	Major Retail
	Associated Retail
	- residential
	- visitor attractions
	- office
Office/Commercial	
	High rise Office
	Medium rise Office
	Low rise Office
	Industrial Park
Other	
Multimodal Transportation facility (linked to Union Station)	
Hospital	
Higher Education Institution	

2. comparison of the 10 attractions identified in the Winnipeg Tourism Development Study
3. assessment of farmers' market/public market and year-round water amusement area.

Recent appraisals have recognized a potential market capability to absorb 350 to 400 market apartment units per year on this site, assuming that the first such units became available in 4 to 5 years' time. Such development must address concerns related to the scale of existing downtown apartment development, noise impacts related to the main rail line, and compatibility with other developments on the site.

4.3 DEVELOPMENT FOCUS

Identifying key thrusts for East Yard redevelopment was an important step in the Task Force's work. A major contribution to this process was a presentation to the Task Force by Mr. E. Gaboury of Gaboury Associates Architects, which describes his vision for redevelopment of the East Yard. Gaboury's paper (presented as Attachment I) brought out the following key points:

- development of the East Yard must be accomplished with a sense of purpose: it must be coherent and attain the highest level of excellence
- East Yard development should respond to its total environment; it should also be unique to Winnipeg
- the development must compensate for Winnipeg's harsh winter. It should attempt to provide a form of winter wonderland for the city
- the high line and its berm should be treated as a positive feature, possibly by landscaping it with coniferous trees
- distinguished portals and gates should be built at entrances to the Yard
- a major flagship element is likely to be needed to focus attention on the area
- an historical interpretive centre is an essential development component to help capture the special historical significance of the site

- a main attraction for the site could be a "Son et Lumiere" depicting the major historical events that occurred at or near the East Yard. It could be located on the Transfer Track Bridge that crosses the Assiniboine River.

4.4 REVIEW OF THREE DEVELOPMENT PLAN OPTIONS

This section summarizes a review of three development plan options examined by the Task Force. The purpose of this analysis was to explore different approaches for development of the lands to be held by a tripartite public development agency, and to examine the potential financial implications for this agency. Each option therefore includes the same assumptions with respect to location of the York and St. Mary Avenue extensions, the major north/south access roads, and the commercial uses to be developed north of York Avenue. (See Figures 4, 5 and 6 in the Task Force report for a description of each option.)

An Overview Analysis which compares and evaluates the three options from the following perspectives is presented below:

- land use allocation
- special public place objective for East Yard
- private/public sector participation
- staging and scheduling
- public agency self sufficiency.

An Option-By-Option Analysis, outlining the assumed schedule for initial development and specific advantages and disadvantages for each option is presented in Attachment J.

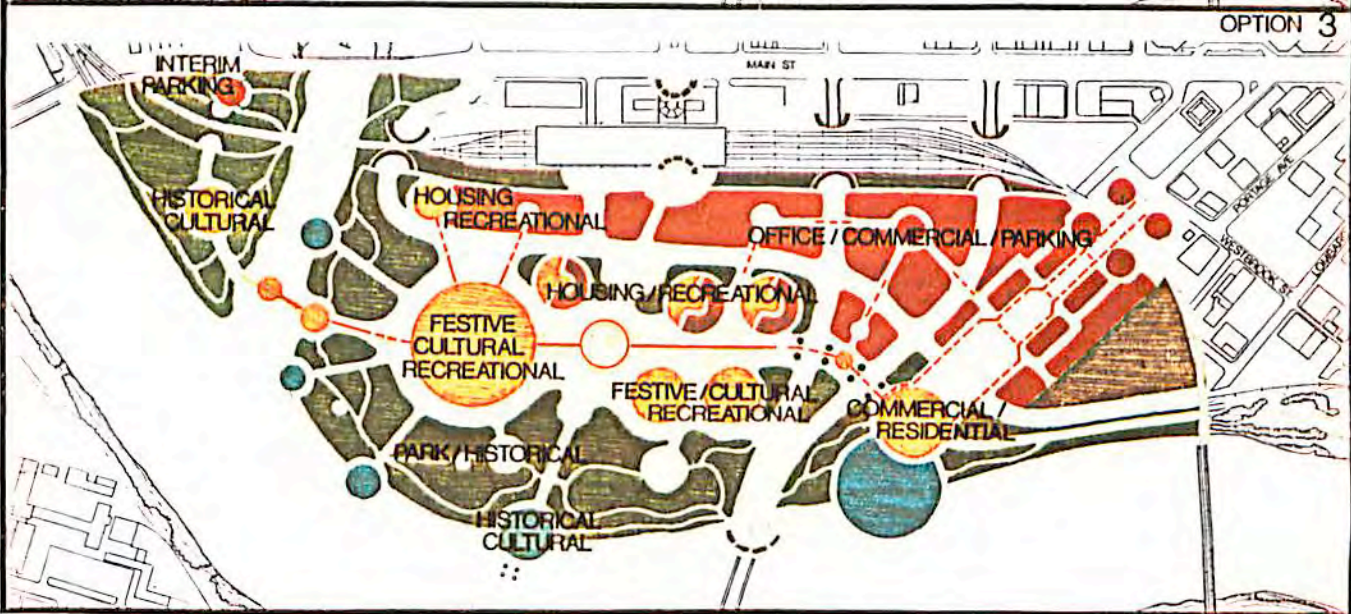
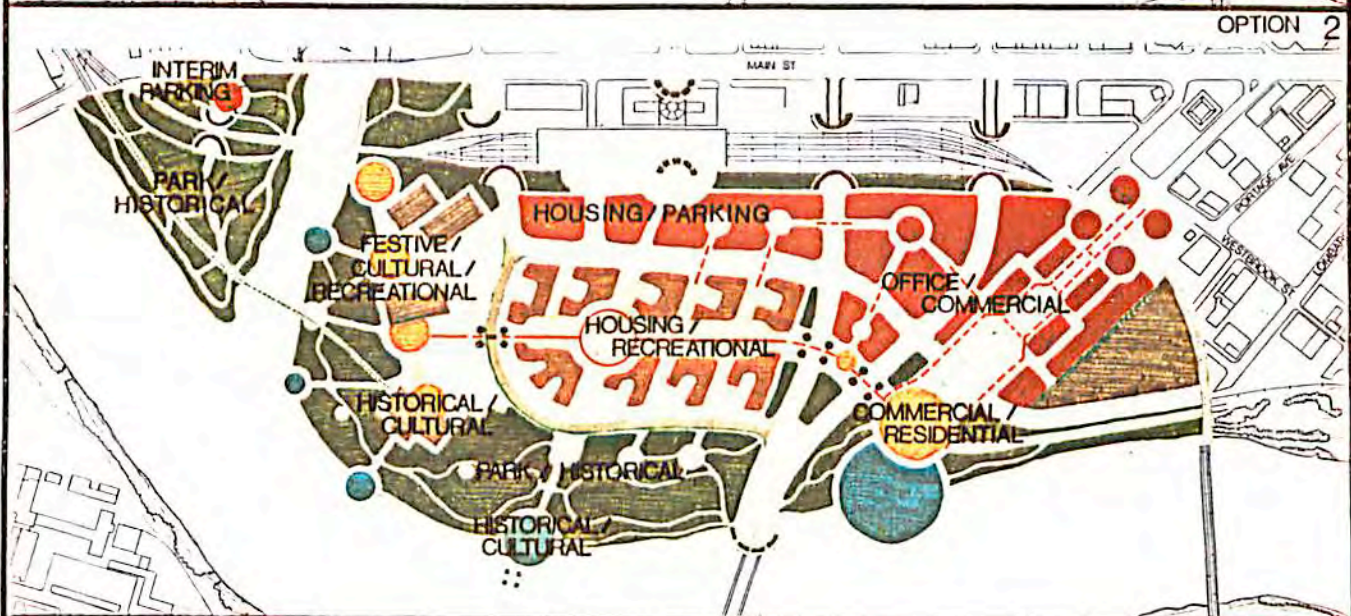
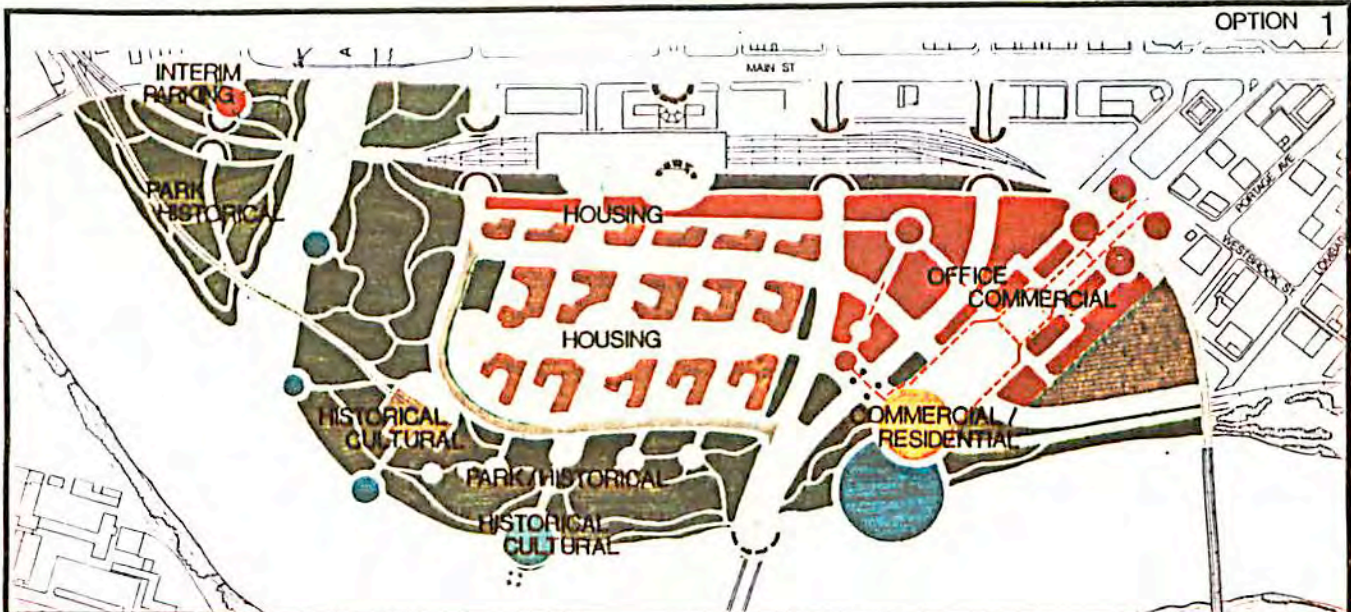
The analysis in general underlines the need for adopting a development plan that facilitates effective staging and early development throughout the site, with an appropriate mix of land uses that reflect the recommended site planning principles and objectives. Among the options examined, Option 3 tends to achieve these requirements best; however, public consultation (including discussions with possible developers) is needed to confirm and expand upon this preliminary analysis.

4.4.1 Land Use Allocation - Three Options





Figure 4-2 reviews the assumed development for each of the three options within five years, i.e., by the summer of 1991. A variation on Option 2 (Option 2a) is also presented, reflecting a somewhat slower development schedule than has been assumed for the general analysis. As noted, each option adopts the same assumptions with respect to the location of the York-St. Mary Avenue extension, the major north-south access roads and the commercial uses to be developed north of York Avenue.

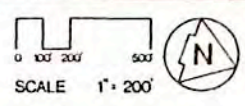
The three options examined in this section were selected to highlight the following options (in addition to scheduling) that affect planning of public lands in the East Yard:

1. Intensity and mix of land use:
 - Option 1 assumes a mix of riverbank park and apartment housing, with historical/cultural use included in the park area
 - Options 2 and 3 allow for more cultural, recreational and festive uses than Option 1 (with accordingly reduced riverbank park and housing areas); these two options differ in that Option 2 retains more emphasis on apartment housing (with accordingly less emphasis on cultural, recreational and festive uses) than Option 3
 - Option 3 also allows for possible office/commercial development south of York Avenue (adjacent to the rail line).
2. Retention of existing facilities:
 - Option 2 retains each of the four existing buildings at the south end of the site
 - Option 1 retains the B & B building and the rail track over the bridge to this building
 - Option 3 assumes removal of both the B & B and Johnson Terminal Buildings (and probably the two stable buildings).
3. Additional Main Street vehicle access:
 - Options 1 and 2 assume a new underpass at Assiniboine River along with a site road along the riverfront to York Avenue
 - Option 3 uses the existing underpass near the Assiniboine River and excludes a site road along the riverfront to York Avenue.



EAST YARD TASK FORCE STUDY
PRELIMINARY CONCEPTUAL PLAN

-  PEDESTRIAN BRIDGES
-  SITE PORTALS / GATEWAYS
-  PAVED ACCESS
-  FLAGSHIP ELEMENT



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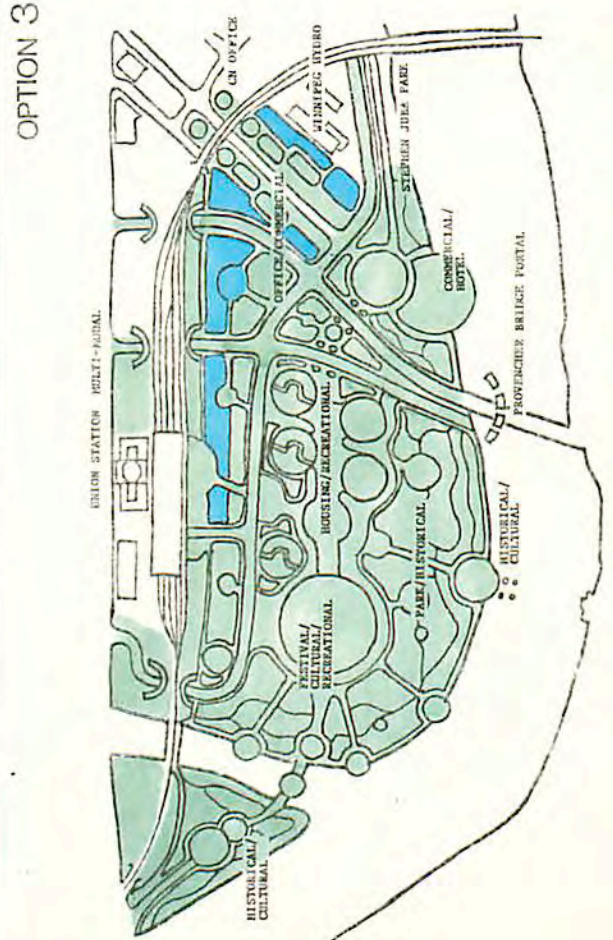
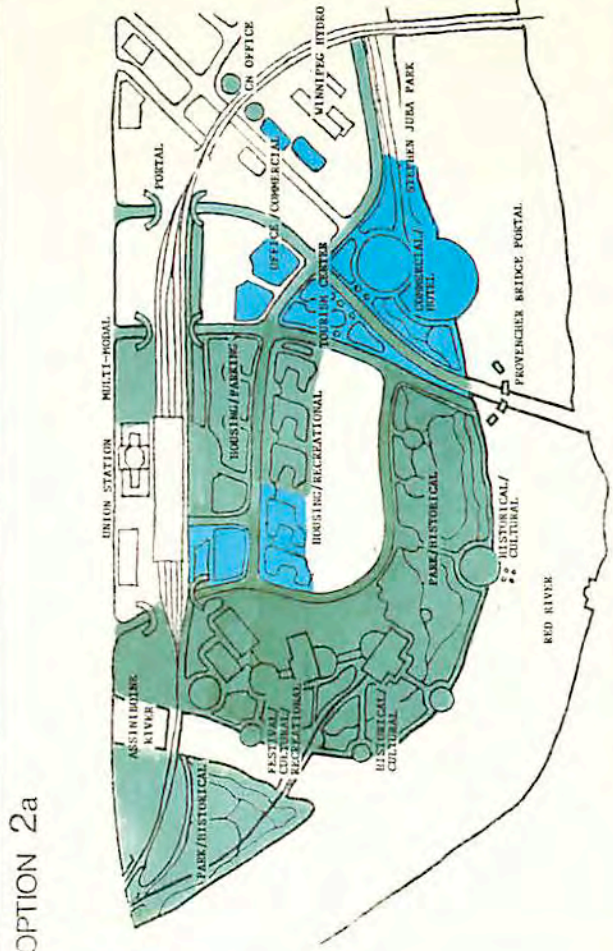
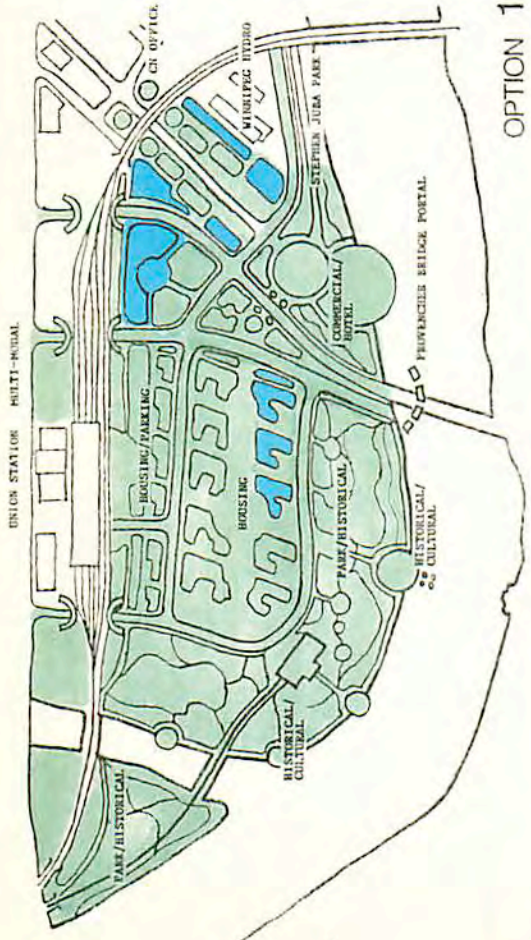
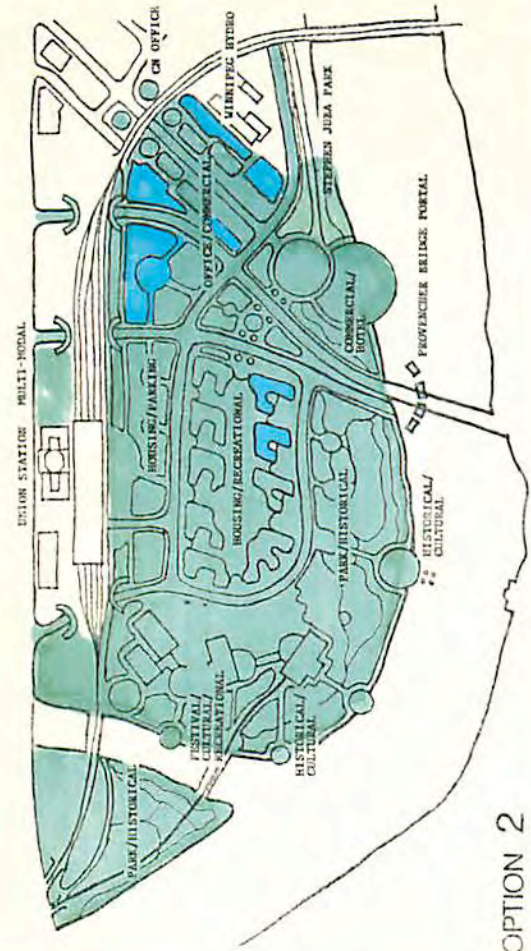


FIGURE 4.2

REMOVED
 UNDER CONSTRUCTION
 OPEN

EAST YARD TASK FORCE STUDY
 SUMMER 1991

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4.4.2 Special Public Place

The site planning principles call for the encouragement of relatively intensive use public functions (historical, cultural, recreational, entertainment) as a key theme for the riverfront areas, with special emphasis on the Forks as a historic place. The entire East Yard area is intended to become a special place for Winnipeg residents and visitors, with activities that complement activities in the remainder of the downtown.

Options 2 and 3 go considerably further than Option 1 towards meeting these objectives, and would accordingly imply far higher public visitation to the riverfront areas on a year-round basis. Option 1 implies emphasis on development of a major housing precinct which, by its nature, will be oriented primarily for the use of its own residents (i.e., a few thousand people); such a development would also compete, to some extent, with other downtown housing projects. In contrast, Options 2 and 3 imply integrated public access throughout the site with emphasis on activities that would attract 200,000 to over 500,000 visits per year to enjoy a special riverfront recreation, cultural and festive environment; in addition, the specific historic/cultural/recreational and festive activities suggested for these options would complement and strengthen the entire downtown area of Winnipeg.

Option 3 versus Option 2 represents an approach with potentials for higher public visitation and activity integration, more intensive year-round historical/cultural functions at the Forks, and superior pedestrian all-weather access.

4.4.3 Private/Public Sector Participation

The Task Force's objectives include encouragement of private sector participation to complement public initiatives, and to ensure maximum possible benefits from the use of scarce public sector funds.

In recognition of the limited public sector budgets available for this development, each option implies \$20 to \$30 million of public sector investment over the next five years (excluding administration, program development and land carrying costs). Table 4-2 sets out estimated

allocation of this investment for the riverfront areas (indicating variations by option) and for the balance of the public lands (where costs are assumed to be the same for each option). In summary, Table 4-2 indicates the following:

- a. A \$20 million capital program budget could be allocated approximately as follows:

	(\$ million)
- Clearing and Relocation	3 to 4
- Road Access, Utilities, Parking	4 to 6
- Landscaping, Riverbank and Site Enhancement	6 to 8
- Major Function Assistance	3 to 6

- b. Over three-quarters of the estimated costs for a \$20 million budget would be related to the riverfront lands; in addition, most of the remaining costs not incurred in the riverfront areas would be related to clearing and relocation or access and services costs which are essential to the development of the riverfront lands.
- c. Option 3 would be slightly less costly to develop than the other two options (due to savings in costs for the underpass, the related portal, and site roads and services), and this would enable a slightly larger budget to assist in development of a major function e.g., son et lumiere and interpretive centre. (If appropriate, Options 1 and 2 could consider using the same Main Street underpass as Option 3 in order to secure some of these savings.)
- d. Option 2 would be slightly less costly to develop than Option 1.

Private sector investment is expected to play a very significant role in each of the options, with estimated expenditures as presented in Table 4-3 ranging from \$60 to over \$150 million during the next five years on the public lands portion of the site (this excludes investment for projects on lands retained by CN). Option 1 implies that private sector investment is focused almost entirely in housing projects spread over the next decade; in contrast, Options 2 and 3 diversify private investment to include participation in recreation and other activities. Option 3 is expected to stimulate the most private sector investment during the first five years, reflecting faster access development (see Staging and Scheduling below), a wider range of opportunities, and possible public ownership of additional riverfront lands north of York.

TABLE 4-2

BASIC PUBLIC LANDS CAPITAL DEVELOPMENT COSTS - 1987-1991 (\$ million)
 (excludes York-St.Mary extension and CN Retained Lands)

Activity	South Point & Riverfront Areas			Central Area	York/ St.Mary Area
	Option 1	Option 2	Option 3		
1. CLEARING AND RELOCATION					
CN Agreement	2.0 (1.0)	2.0 (1.0)	2.0 (1.0)	1.0 (0.5)	2.0 (1.0)
-less Recoveries	0.5	-	0.6	-	-
Demolish four buildings	0.4	0.4	0.4	-	-
Riverbank	0.2	0.2	0.2	0.2	0.1
Fill, removal, grade, level	2.1	1.6	2.2	0.7	1.1
2. ROAD ACCESS, PARKING AND UTILITIES					
Assiniboine underpass	2.3	2.3	0.8	-	-
Site roads	0.8	0.8	0.4	0.6	-
Site municipal services	0.8	0.8	0.8	0.6	-
Surface parking (excludes housing)	0.6	0.9	1.2	-	-
	4.5	4.8	3.2	1.2	-
3. LANDSCAPING AND SITE ENHANCEMENT					
Mainline berm	0.8	0.8	0.8	-	-
Portals	1.7	1.7	1.2	-	-
Landscaping (excluding Promenade)					
-Riverbank (excluding Promenade)	3.4	2.1	2.1	-	-
-Other	-	0.1	0.1	0.2	-
Pedestrian Link Assistance	-	-	-	1.5	-
	5.9	4.7	4.2	1.7	-
4. MAJOR FUNCTION ASSISTANCE					
Provision for assistance:					
-Rail Museum/Interpretive Centre/Other*	2.8/10.0	4.2/10.0	-	-	-
-Interpretive Centre/Son et Lumiere/Other*	-	-	5.7/10.0	-	-
	2.8/10.0	4.2/10.0	5.7/10.0	-	-
5. TOTAL PUBLIC CAPITAL COSTS	15.3/22.5	15.3/21.1	15.3/19.6	3.6	1.1

* Functions such as festive market and multi-cultural facilities.

TABLE 4-3

**PRELIMINARY ESTIMATE OF PRIVATE SECTOR INVESTMENT^{2/}
POSSIBLE PUBLIC LANDS PROJECTS - 1987 to 1991 (1986 \$ million)**

<u>Project Activities</u>	<u>Option 1</u>	<u>Option 2</u>	<u>Option 3</u>
Apartment Housing ^{1/}	60/80	60/80	80/110
Housing Related Retail	2/3	2/3	3/4
Leisure/Recreation	0/1	15/25	20/40
Festive/Market/Cultural	0/1	10/17	10/21
Total Private Investment: 1987-1991	<u>62/85</u>	<u>87/125</u>	<u>113/175</u>

^{1/}The analysis assumes a maximum development of 300 to 400 units per year, reflecting market constraints. Options 1 and 2 assume 800 units by the end of 1991 and are constrained by the delay in development of site access; Option 3 assumes 1,050 units within the same five years, and reflects somewhat earlier development on lands south of York Avenue as well as public ownership of an attractive riverfront area north of York Avenue. It should be noted that considerable housing development is estimated to occur in the years after 1991 for Option 1 (1,100 units) and Option 2 (up to 600 units), implying additional private investment as follows (1986 dollars):

- Option 1: \$85/115 million
- Option 2: \$47/ 62 million

^{2/}These project activities could include public sector assistance or related investments (e.g., tourism orientation centre).

The feasibility of likely private sector involvement can be clearly established only after proper public consultation, discussion and negotiation with interested groups, and this is therefore a priority for the next stage in East Yard planning. Similarly, it will be equally important to confirm specific public sector investment commitments for the next five years.

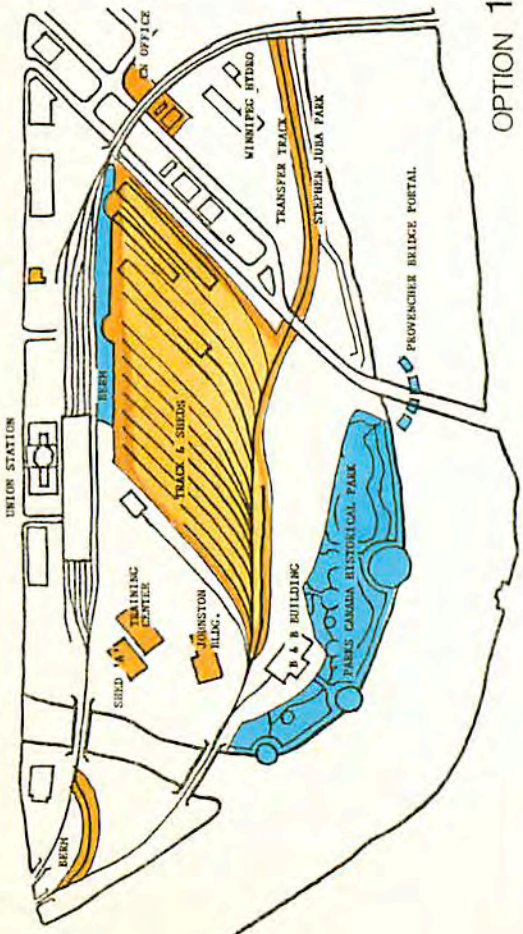
4.4.4 Staging and Scheduling

Development of the East Yard will require practical staging and scheduling of activities. In general, it is recommended that riverfront public sector projects near the Forks be used to initiate the program, thereby stimulating the other interest and investment required for the entire program. It is understood that the East Yard site will probably continue to show development activity over the next ten to twenty years; the focus of the present study relates to the start of this process over the next four years.

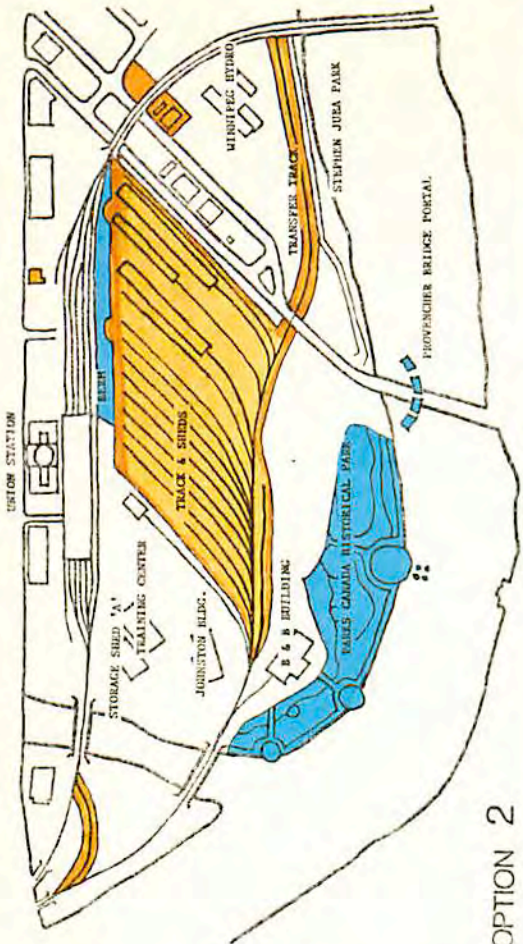
Figures 4-3 to 4-6 highlight the assumed development activity by summer over the next four years for each option (including the delayed schedule approach of Option 2a). In each instance, three different activities are described: (a) removal of existing buildings or rail activities; (b) construction of new facilities; and (c) new facilities that are open for use.

Development staging will be determined in large measure by the timing of rail clearing and subsequent road access development. Key considerations include the following:

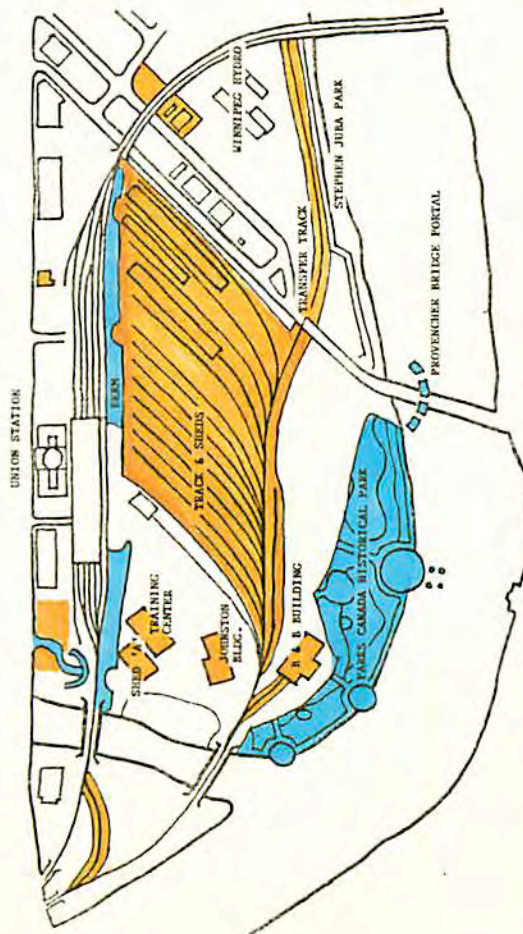
- a. The York/St. Mary extension is presently planned for opening in 1991, and this timing is accordingly assumed in the present analysis for any activity involving construction of a new underpass. It is apparent that considerable delays can occur in the design and approval (by the Canadian Transport Commission) of any new underpass; however, the schedule might be improved in future to allow such facilities to be completed by summer 1990.



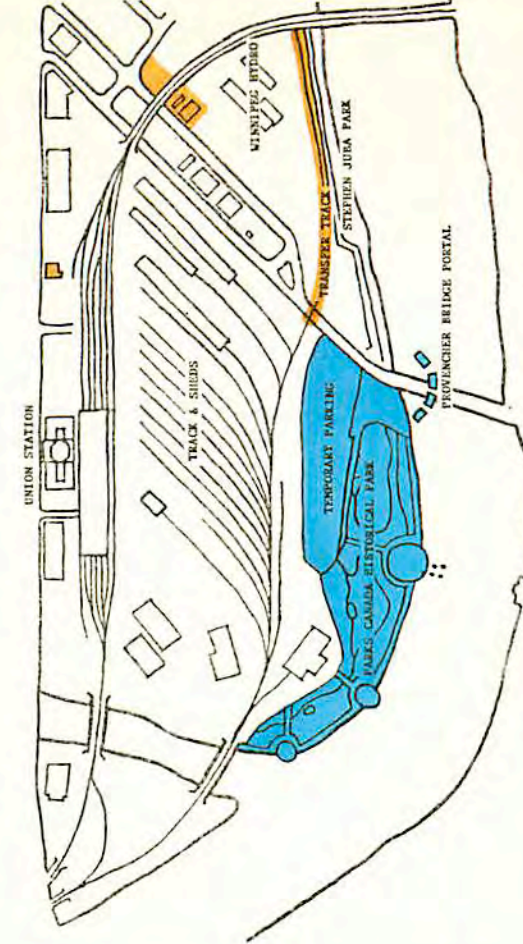
OPTION 1



OPTION 2



OPTION 3



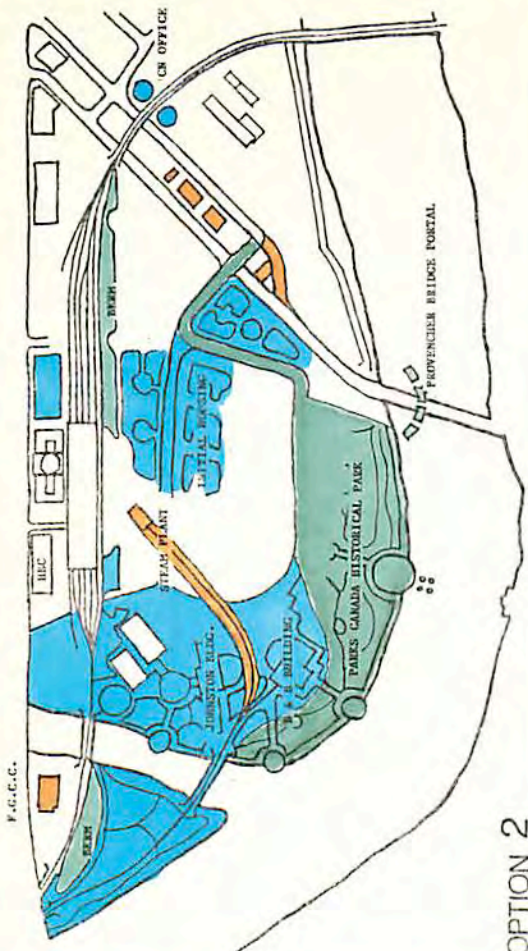
OPTION 2a

EAST YARD TASK FORCE STUDY
SUMMER 1987

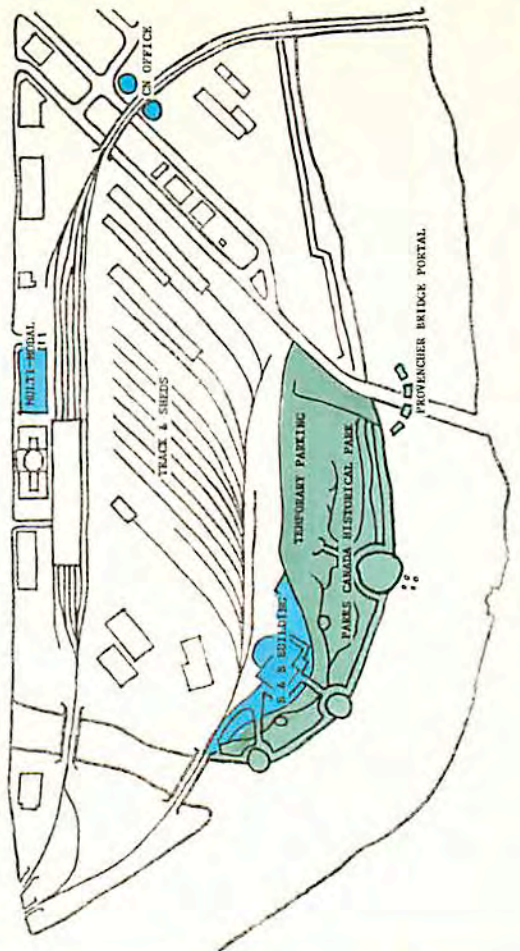
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GABOURY ASSOCIATES ARCHITECTS INC.

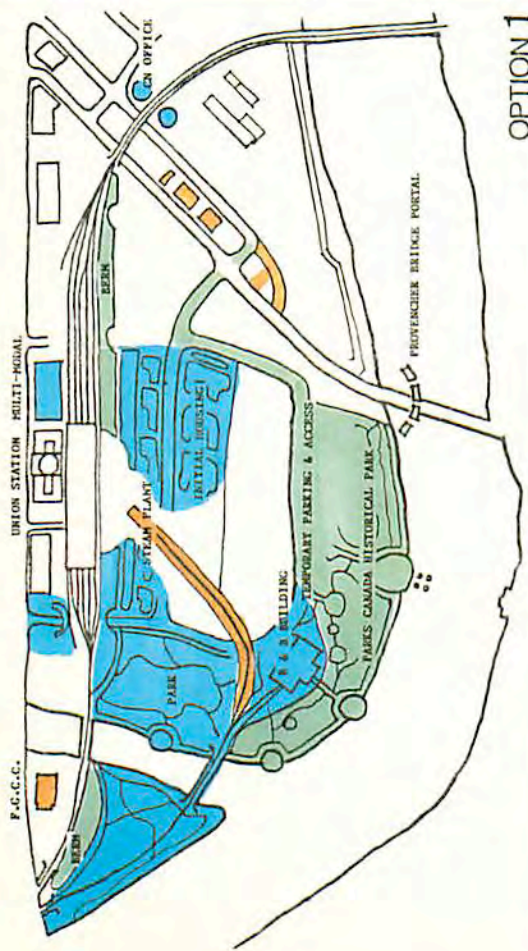
FIGURE 4.3



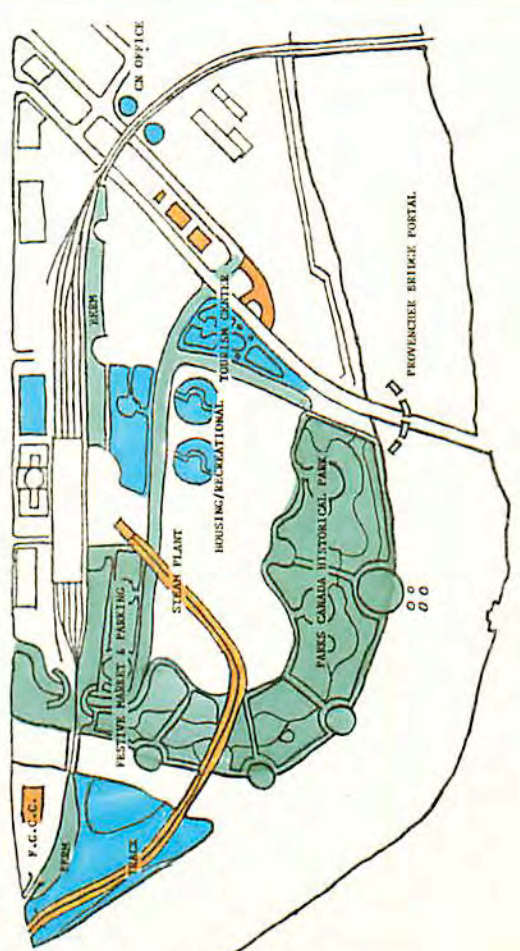
OPTION 2



OPTION 2a



OPTION 1



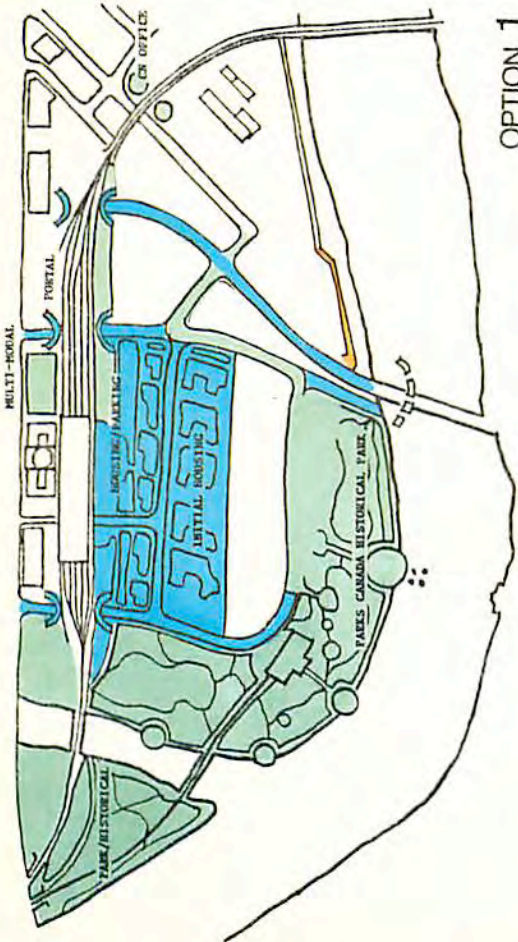
OPTION 3

FIGURE 4.4

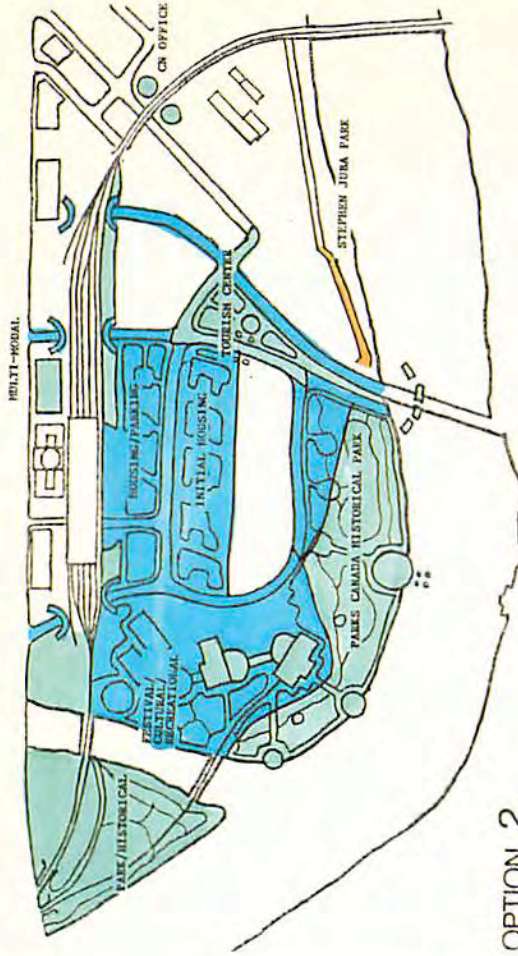
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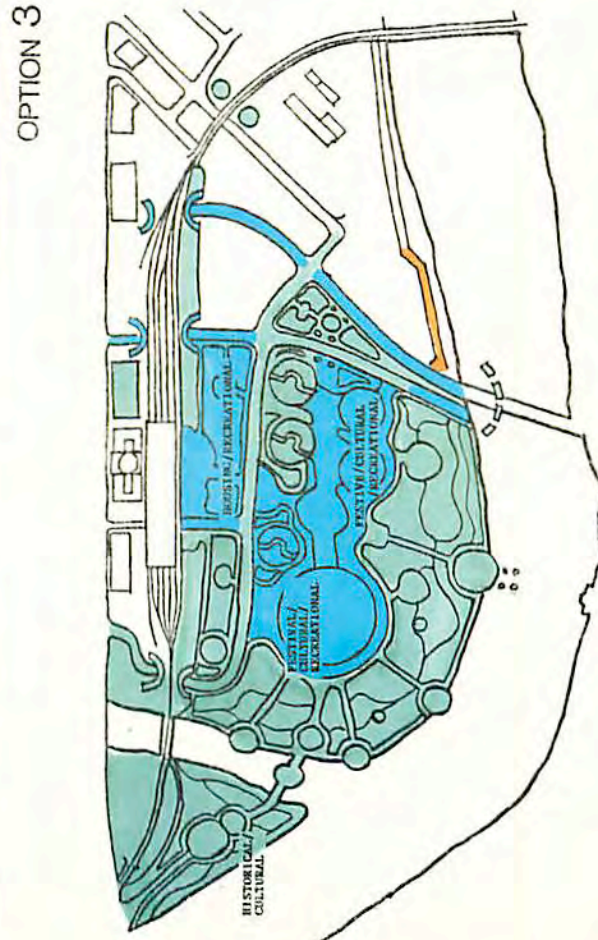
EAST YARD TASK FORCE STUDY
SUMMER 1988



OPTION 1

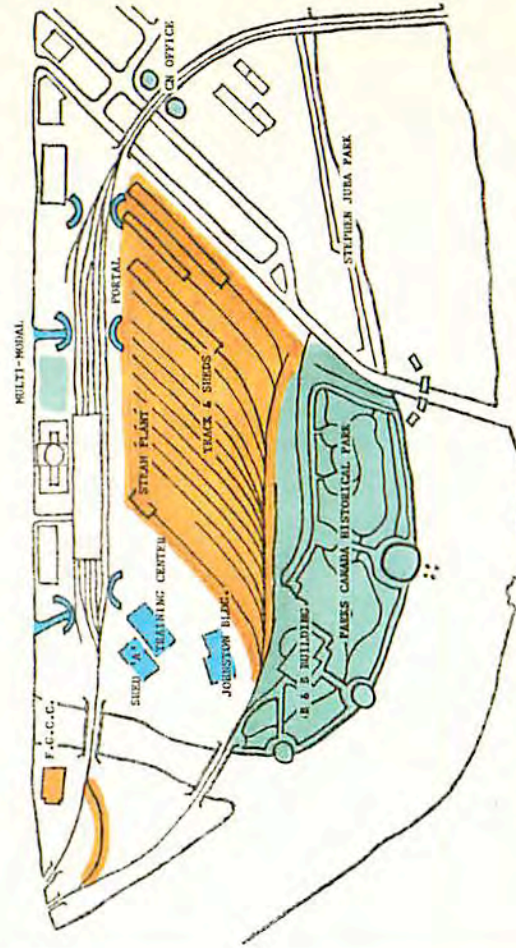


OPTION 2



OPTION 3

OPTION 2a

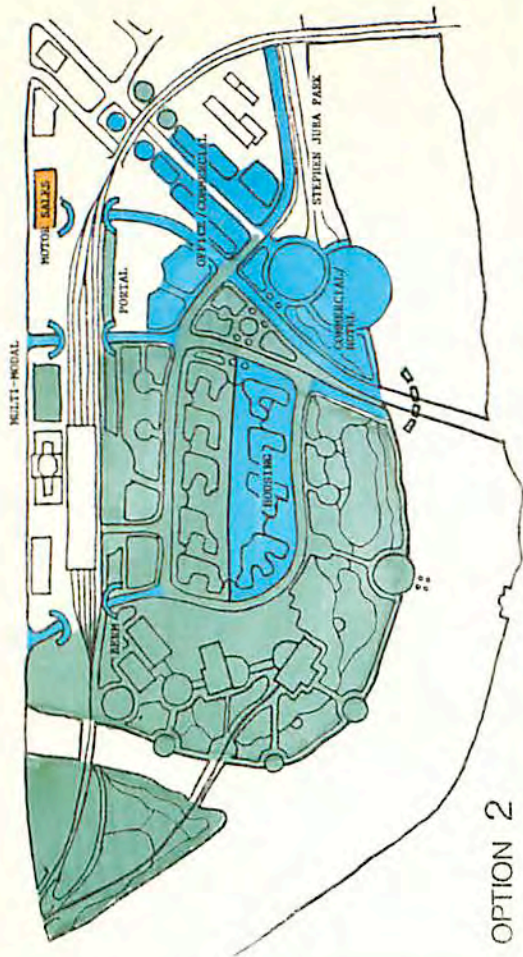


EAST YARD TASK FORCE STUDY
SUMMER 1989

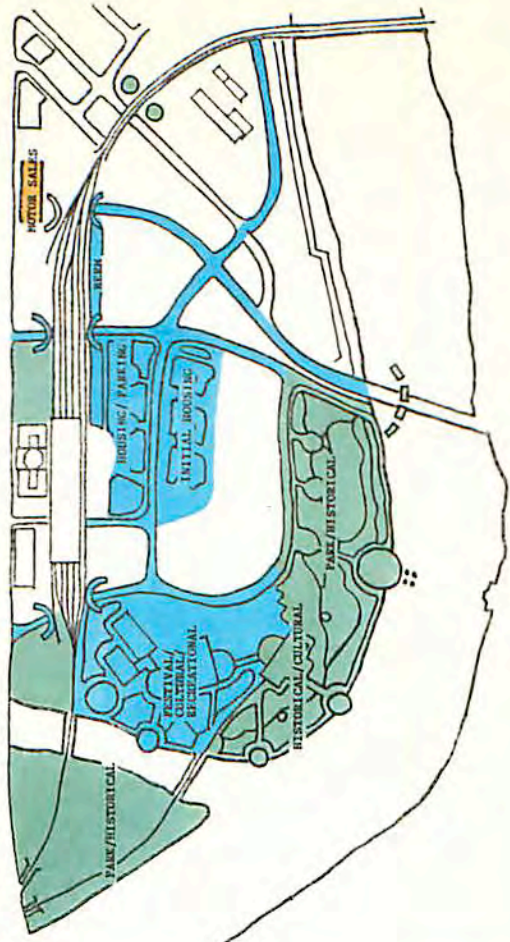
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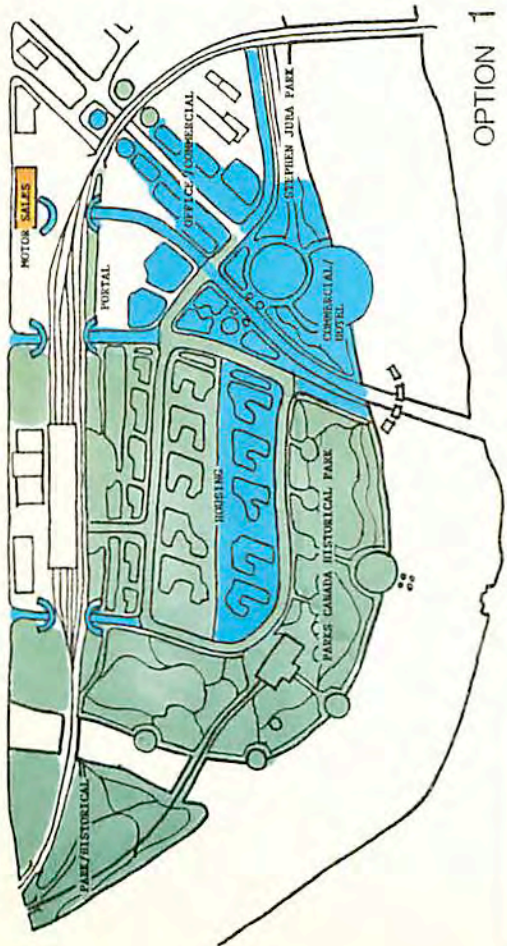
FIGURE 4.5



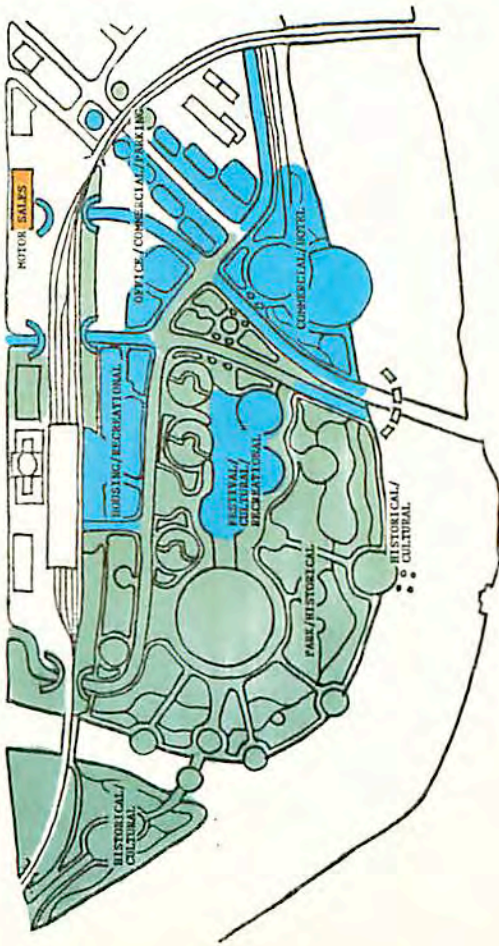
OPTION 2



OPTION 2a



OPTION 1



OPTION 3

GABOURY ASSOCIATES ARCHITECTS INC.

REMOVED
UNDER CONSTRUCTION
OPEN

EAST YARD TASK FORCE STUDY
SUMMER 1990

FIGURE 4.6

- b. Except for the use of an existing underpass from Main Street, as assumed in Option 3, new roads to the southern part of the site can be developed within the next few years on practical basis only after removal of the existing railyard activities (other than the steam plant).
- c. Options 1, 2 and 3 assumes that removal of railyard activities will proceed expeditiously to open up the full site as quickly as is reasonable for investment by private and public sector interests; in contrast, Option 2a assumes delay in the removal of railyard activities for two years. Site roads are accordingly developed as allowed by the assumed rail removal and completion of underpasses.
- d. Each option includes provision of road access for the Parks Canada park which is to open in summer 1988.

A key feature of Options 1 and 2, as presented here, is the necessity to delay any new access from Main Street until mid-1991 (due to the assumption that a new underpass approach is selected); this accordingly causes delay (due to poor access) in any realistic prospect to develop new festive/cultural/recreational activities in the southern part of the site until 1990. This scheduling aspect of Option 2 is alleviated in part through pre-building of site roads; selection of an existing underpass option for Main Street access (as per Option 3) could also be considered.

Option 3 assumes adoption of a road access network that can be developed at a relatively early stage, i.e., by mid-1988, through use of an existing underpass from Main Street; accordingly, this option facilitates early development throughout the site and enhances early access to the southern riverfront areas. Selection of this option, however, requires further study -- including confirmation of private sector interest in the appropriate recreation and housing projects.

Option 2 implies a more cautious staging approach than Option 3, utilizing a road system that facilitates separation of riverfront and other functions, possible retention of existing buildings, and the development of a new underpass from Main Street. Option 1 represents an even slower development (due to the time period required to complete a much larger scale of housing development than is implied by the other options).

A variation on Option 2 was also examined (Option 2a) which implied a further delay in development through retention of present rail activities until mid-1989. This approach, if acceptable to all parties, would leave CN responsible for the costs of the central site area until such time as rail relocation had been completed; it would also delay the public development agency's costs for relocation and clearing and would remove pressure to finalize projects throughout a major area of the site. This delayed relocation approach, however, is not recommended for further examination in light of the many problems it would create for the new public development agency, including:

- a. requirement to construct special interim access for Parks Canada by mid-1988 (this access could not be used when the future relocation and development proceeds)
- b. physical access to the key southern riverfront area would be severely constrained, and would probably prevent any major projects from proceeding in this area until 1990 (this problem might be alleviated somewhat by use of the existing underpass from Main Street, as in Option 3, plus the existing CN roadway adjacent to the main line; however, CN is expected to resist strongly, for safety reasons, any regular or significant public access to the active railyard area; in addition, any Main Street access is expected to play only a secondary access role to the new development)
- c. the implied delay in both riverfront and central site development would reduce the near term prospects for the new public development agency to transfer its ongoing land costs (taxes, etc.) to others and to begin earning lease and other incomes; this in turn implies higher public sector costs for this development, and lengthens the time period before financial self-sufficiency is achieved for the new agency. Ongoing land carrying costs (land related taxes, security, insurance, etc.) of the new public development agency, could exceed \$2 million over the next five years, with over 70% deriving from the agency's extensive riverfront properties; the new public development agency must obviously seek to transfer most of such land carrying costs to specific development projects at the earliest opportunity, and this is constrained under any option that delays removal of railyard activities
- d. continuation of rail yard activity will adversely affect any new riverfront projects, including the Parks Canada project; in particular, it will delay use of the key South Point historic site, the eastern rail bridge facility, and the northern riverfront area adjacent to this bridge

- e. any attempt to close the rail activity without clearing of rail facilities would be impractical since it would expose the public development agency to all of the relevant ongoing land-related costs (including additional tax costs for structures and facilities) without the ability to secure any related benefits.

4.4.5 Public Agency Self Sufficiency

The Task Force's objectives recognize that any public development agency holding the East Yard public sector lands must achieve financial self-sufficiency within a reasonable time period. In order to accomplish this objective, such an agency must earn income from land leases and other activities sufficient to meet its ongoing costs related to land and administration. These costs are estimated as follows for any option or public agency:

- a. Carrying Costs for the Land: the 55 acres to be transferred to the public sector will involve ongoing taxes, insurance, maintenance, security and other costs. Based on 1986 tax rates, assessments and prices, it is estimated that approximately \$2.3 million of such costs (approximately 60% of which are land taxes, and about one-third of which are security costs), will be incurred for these lands over the first five years after clearing and relocation of the rail activities; on an ongoing basis, such costs (\$1986) would approximate \$486,000 per year, estimated as follows (75% relate to lands other than the central area):

<u>Annual Costs</u>	<u>Non-Central Areas</u>	<u>Central* Area</u>	<u>Total</u>
		(\$000)	
Land Taxes	227.4	85.5	312.9
Security	110.0	30.0	140.0
Insurance	18.0	7.0	25.0
Other	<u>7.0</u>	<u>1.0</u>	<u>8.0</u>
Total Annual Costs	<u>362.4</u>	<u>123.5</u>	<u>485.9</u>

*15 acres located in the middle of the public lands south of York Avenue.

- b. Implementation Agency Costs: in addition to special costs related to development and execution of the initial programs (see Table 4-2 plus allowance of approximately \$2 million during the first five

years), any development agency for the East Yard is estimated to incur \$440,000 to \$600,000 in ongoing administrative costs (\$1986). These expenditures relate to staff, participation by directors or other external non-government groups, and basic ongoing office administration expenditures. Additional costs for interest will be incurred if the agency is required to borrow in order to finance any of its initial development and planning activities.

It is proposed that virtually all of the land carrying costs be transferred to the different development groups (private and public) which become involved in the East Yard development. The faster that such transfers occur, the less will be the burden imposed on the public development agency. The following observations are made in this regard:

- a. It may be appropriate to transfer at least some of the riverfront lands to the City, as part of the riverbank park system, in order to remove any ongoing carrying costs for these lands from the new public agency.
- b. Option 3 is the only option which offers a realistic prospect for leasing out the balance of the public lands within five years (thereby removing all land carrying costs from the public agency); during the first five years, initial developments under this option might be sufficient to reduce the initial net carrying cost (to the end of 1991) by half (i.e., by over \$1 million).
- c. Options 1 and 2 are expected to face significant delays relative to Option 3 in securing the lease agreements necessary to transfer all land carrying costs to other groups, and Option 1 is likely to experience significantly greater delays than Option 2.

The balance of the ongoing implementation agency costs are to be met through income earned from land lease rents and other activities. Although it is premature to estimate such incomes at this time, the following observations are noted:

- a. As pointed out above, Option 3 offers better prospects than Options 1 and 2 to yield significant incomes within the next 5 to 10 years.
- b. Potential annual revenues (1986 \$ 000) within 5 years under Option 3 include:

Apartment Housing (800 to 1,000 units)	250 to 350
Festive/Cultural/Recreational Activities	175 to 300
CN Retained Lands (20% interest)	<u>100 to 250</u>
Total Potential Annual Revenue	<u>525 to 900</u>

- c. Under a successful development, annual revenues could be sufficient to meet normal annual costs for the development agency (excluding any debt costs) within approximately five years, and could grow thereafter (assuming land rents that provide for participation in tenant net incomes). It is apparent that more detailed cash flow projections are required to evaluate various scenarios and possible financial targets; this analysis would be part of the work involved in preparation of a Final Financial Plan.

Unless capital funds are provided in excess of \$20 million, the development agency is likely to incur debt during its first five years of at least \$5.5 million, broken out as follows:

	(\$ Million)
- Administration	2.3
- Program Planning and Development	2.0
- Unrecovered Land Carrying Costs	<u>1.2</u>
Total Possible Debt	<u>5.5</u>

Interest costs on \$5.5 million of debt would add an additional \$500,000 (9% interest) to the development agency's annual cash costs. It is unlikely that the agency could secure sufficient revenues to meet such interest costs within 5 years; this implies that the debt would continue to grow, and that the agency's eventual self-sufficiency will be contingent upon significant future yields from participation rents. Resolution of a realistic limit to such debt should be determined when a final Financial Plan is established after public consultation with developers and other interest groups.

In conclusion, the above analysis highlights the financial relevance of timely development for the public lands and the relative advantages suggested for Option 3 relative to Options 1 and 2.

ATTACHMENT A

SUMMARIES OF PAST EAST YARD PROPOSALS

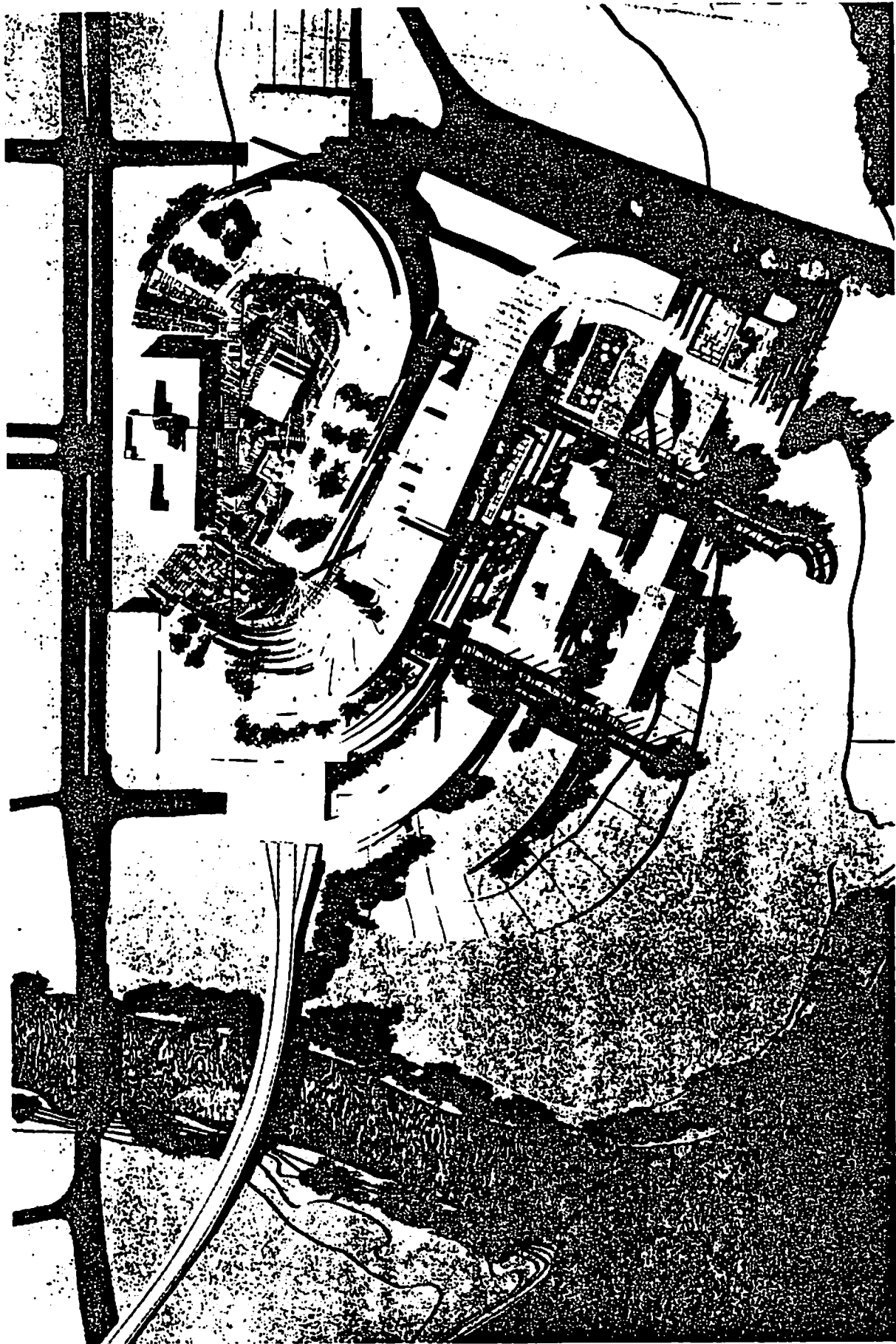
CN-GREAT WEST LIFE PLAN - PHASE 1

PROPONENT: CN and Great West Life
YEAR: 1974
COVERAGE: portion of East Yard south of York
DEGREE OF PLANNING DEVELOPMENT: concept well advanced
MAIN FEATURE: megastructure - integrated, intensive, multiple use
PRIVATE/PUBLIC SECTOR ORIENTATION: private sector lead with retail and office as key revenue generators
MAIN COMPONENTS (Phase 1 - five years)
Retail: 850,000 sq.ft. combined with commercial
Office: 850,000 sq.ft. - GWL, Investors and CNR key occupants
Housing: 1,000 units of medium-rise apartments
Park: 40 acres, mainly along river front
Cultural/Tourism:
Other: 600 room hotel, relocation of rail passenger facilities out of Union Station, remodel Union Station
MAIN TRANSPORTATION NETWORKS
York/St.Mary Extension: included, built over in later phases
North/South Drive: included, run under development in middle of site
Other: Southwest Transit Corridor at grade east of tracks
Status of Pioneer and Water: open in Phase 1
APPROACH TO RIVER FRONT: passive park bounded by housing
SEASONALITY OF PUBLIC USES: year-round retail, summer oriented park

LESSONS:

- opportunity for major retail likely has been superceded by subsequent developments -- St. Vital and Kildonan Shopping Centres, Eaton Place, North Portage
- high level of office/retail/commercial source of concern regarding peak traffic and influence on development of office in central downtown
- underground services considered adequate to accommodate proposal
- more intensively developed park type preferred to passive park by City
- housing development preferred to office and commercial uses by City

Source: Great West Life-CN. East Yard Redevelopment: Pictorial Summary: Study Stage 1, 2 and 3. Winnipeg, Manitoba. 1974.



FIRST STAGE EAST YARD STUDY GROUP PROPOSAL

ALL PARK PROPOSAL

PROPONENT: considered in City of Winnipeg response to CN-Great West Life Study

YEAR: 1975

COVERAGE: portion of East Yard south of York

DEGREE OF PLANNING DEVELOPMENT: preliminary concept only

MAIN FEATURE: extensive park development

PRIVATE/PUBLIC SECTOR ORIENTATION: public sector lead

MAIN COMPONENTS

Retail:

Office: possibly on Main St. and crossing tracks

Housing:

Park: covers most of the East Yard

Cultural/Tourism: Pioneer Village, Outdoor Theatre, Boating/Skating area

Other:

MAIN TRANSPORTATION NETWORKS

York/St.Mary Extension: included, tunnelled under park

North/South Drive:

Other: Transit Corridor on rail tracks

Status of Pioneer and Water: closed

APPROACH TO RIVER FRONT: amenities plus park on river front

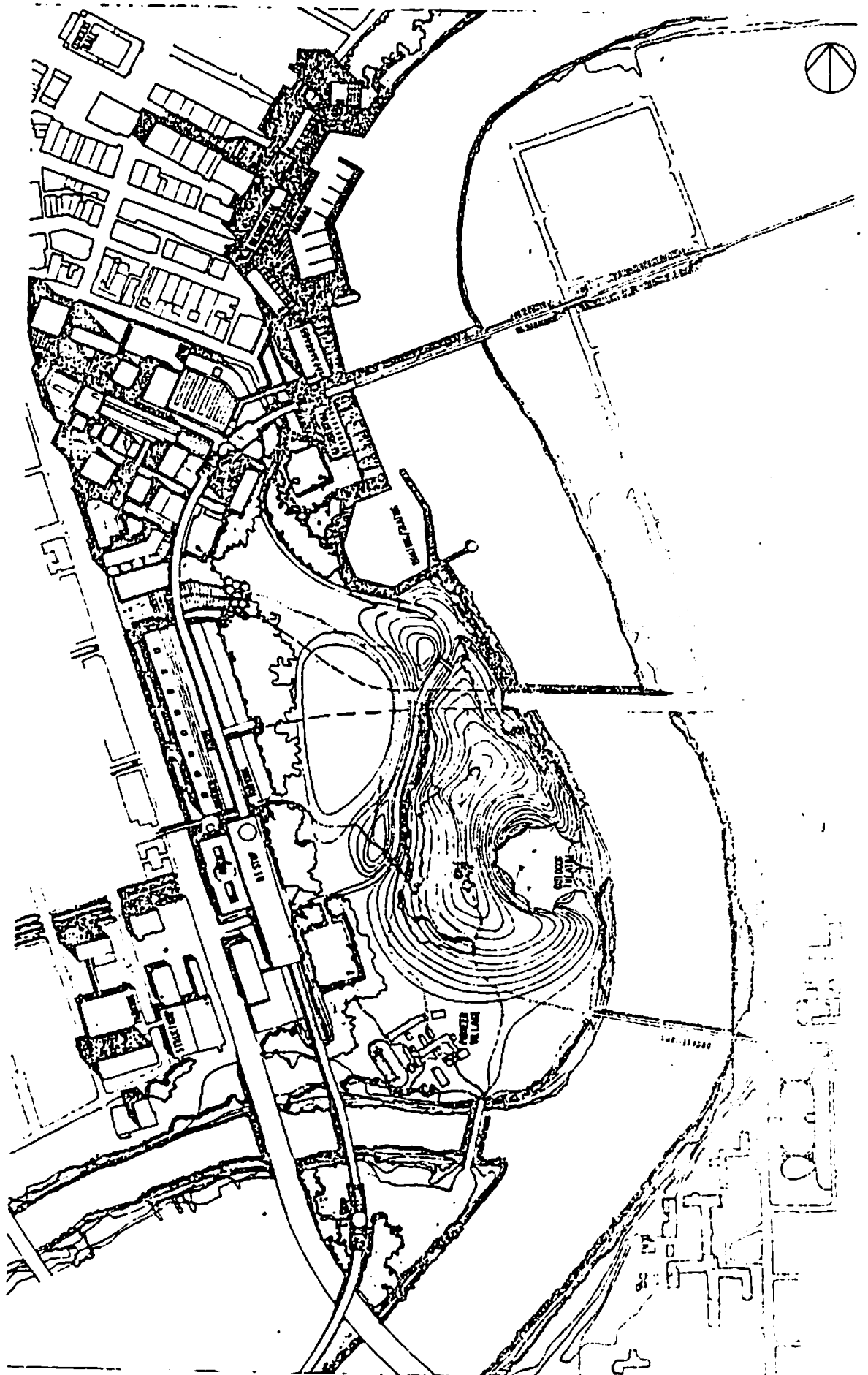
SEASONALITY OF PUBLIC USES: mostly summer, some winter; does not encourage winter use

LESSONS:

- option was not favourably viewed by City as usage expected to be low
- considered high cost park option due to needs for costly access and for clearing land, removing cinder, soil exchange

Source: City of Winnipeg East Yards Task Force, Opportunities for Redevelopment on the CNR East Yards. Winnipeg, Manitoba. 1975.

MAIN CORRIDOR - EAST YARD
PARK PASSIVE RECREATION CONCEPT 1



OXFORD PLAN (very limited documentation available)**PROPONENT:** CN-Great West Life (Oxford as developer)**YEAR:** 1978**COVERAGE:** entire East Yard plus adjoining area to Main St.**DEGREE OF PLANNING DEVELOPMENT:** concept well developed**MAIN FEATURE:** staged, point towers, multiple use development**PRIVATE/PUBLIC SECTOR ORIENTATION:** private sector lead with retail and office as key revenue generators**MAIN COMPONENTS** (7 stages over 20-25 years)**Retail:** 600,000 sq.ft. (Stage 4) adjacent to main line**Office:** 800,000 sq.ft. with East Yard (Stages 2, 5, 6, including CN and GWL), 1,600,000 sq. ft. outside the tracks**Housing:** 1,000 units high rise, 450 units low rise (Stage 3)**Park:** substantial acreage mainly in one location in vicinity of Forks**Cultural/Tourism:****Other:** arena located York/St.Mary extension island (Stage 1), hotel on Assiniboine River bank, 400 room hotel (Stage 3)**MAIN TRANSPORTATION NETWORKS****York/St.Mary Extension:** yes**North/South Drive:** major route goes through middle of development**Other:** north-south river drive**Status of Pioneer and Water:** closed, acts as entry/exit to major parking structure**APPROACH TO RIVER FRONT:** passive park separated by river drive**SEASONALITY OF PUBLIC USES:** arena and retail are year-round, park is summer oriented**LESSONS:**

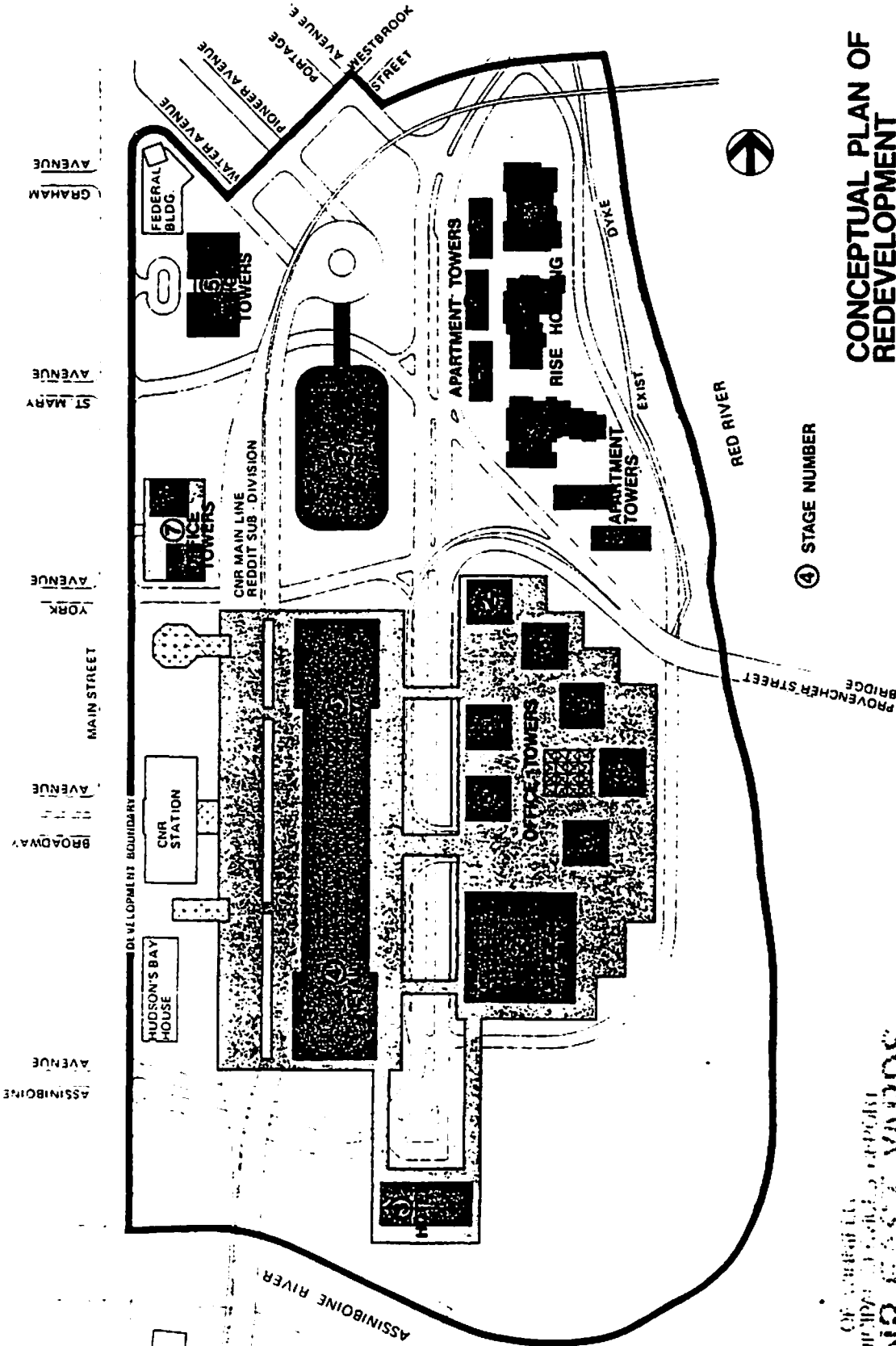
- existing, offsite water, wastewater and sewer were apparently adequate to accommodate the development
- other comments on CN-Great West Life Plan (1974) seem to apply here

Source: W.L. Wardrop & Associates Ltd. CNR East Yards Redevelopment: Municipal Services Report. Prepared for City of Winnipeg. Winnipeg, Manitoba. 1978.

CONCEPTUAL PLAN OF REDEVELOPMENT

SCALE: 1" = 330' ±
FEBRUARY 1978
W. L. WARDROP & ASSOCIATES LTD.

CONCEPTUAL PLAN OF REDEVELOPMENT
OF THE CNR EAST YARDS
REDEVELOPMENT



④ STAGE NUMBER

LAKEVIEW PLAN (only one site plan available - no documentation)**PROPONENT:** Lakeview Properties Ltd.**YEAR:** 1979**COVERAGE:** entire East Yard except north of Water**DEGREE OF PLANNING DEVELOPMENT:** preliminary concept only**MAIN FEATURE:** medium density, suburban,
residential/office development**PRIVATE/PUBLIC SECTOR ORIENTATION:** private sector lead with office and housing
as key revenue generators**MAIN COMPONENTS****Retail:** supermarket in York St. extension island**Office:** 340,000 sq.ft. adjacent to mainline, low
rise**Housing:** medium density townhouses**Park:** passive park along river front**Cultural/Tourism:****Other:** marina on shore of Red River**MAIN TRANSPORTATION NETWORKS****York/St.Mary Extention:** yes: York phase 1; St.Mary later**North/South Drive:** yes: two drives (local access only) one
through development, one paralleling river**Other:** north-south river drive**Status of Pioneer and Water:** remain open**APPROACH TO RIVER FRONT:** passive park separated by river drive**SEASONALITY OF PUBLIC USES:** supermarket is year-round, park is summer
oriented**LESSONS:**

- intensity of development may be too low for value of the land
- first initiative in direction of emphasizing housing as one of the key revenue generators

Source: Lakeview Properties Ltd. Site plan entitled "Riverside Park (CN East Yard)". Winnipeg, Manitoba. 1978.

RIVERSIDE PARK (CN EAST YARD)

WINNIPEG, MANITOBA, CANADA
LAKEVIEW PROPERTIES LTD. DEVELOPER
RICHARD E. MARTIN A.I.A. ASSOCIATES
ARCHITECTS & LAND PLANNERS



100 0 100 200
SCALE 1" = 100
MAY 8, 1979

CMHC HOUSING PLAN

PROPONENT: CMHC
YEAR: 1979
COVERAGE: entire East Yard except north of Water
DEGREE OF PLANNING DEVELOPMENT: concept moderately well advanced
MAIN FEATURE: medium density, residential development
PRIVATE/PUBLIC SECTOR ORIENTATION: private sector lead with housing as key revenue generator

MAIN COMPONENTS (staged over ten years)

Retail: minimal associated with housing

Office:

Housing: 1,500-2,500 units, apartment building and stacked townhousing

Park: 22 acres, mainly in one location in vicinity of Forks

Cultural/Tourism:

Other:

MAIN TRANSPORTATION NETWORKS

York/St.Mary Extension: yes: large island with housing

North/South Drive: yes: circuitous through development

Other:

Status of Pioneer and Water: remain open

APPROACH TO RIVER FRONT: passive park separated by river drive

SEASONALITY OF PUBLIC USES: park is summer oriented

LESSONS:

- one-dimensional approach, does not offer a public sense of place in East Yard
- substantiation for level of housing proposed is needed, must define client for housing
- could need a substantial buffer from rail lines for housing to offset noise

Source: R.N. Allsopp and S. Cohlmeier. Winnipeg East Yards: Redevelopment Feasibility Study prepared for CMHC. Winnipeg, Manitoba. 1979.



A.R.C. PROPOSAL - NORTH POINT ALTERNATIVE

PROPONENT: A.R.C. Management Board

YEAR: 1980

COVERAGE: total site including South Point (north to Water Avenue)

DEGREE OF PLANNING DEVELOPMENT: site plan and costing estimates

MAIN FEATURE: residential/commercial park development with visitor interpretive centre

PRIVATE/PUBLIC SECTOR ORIENTATION: riverbank park and interpretive centre are public developments

MAIN COMPONENTS

Retail: unspecified

Office: -

Housing: unspecified type and amount

Park: 30 acres (South and North Point)

Cultural/Tourism: visitor interpretive centre (VIC) (8 acres including parking)

Other: marked historic Forks/CN Station display/Upper Fort Garry display

MAIN TRANSPORTATION NETWORKS

York/St.Mary Extension: included in site plan

North/South Drive:

Other: included in site plan; runs across South Point to a twinned Norwood Bridge

Status of Pioneer and Water: appear to remain open

APPROACH TO RIVER FRONT: hard face at VIC
passive park on the remainder of the site

SEASONALITY OF PUBLIC USES: summer use park; year round VIC

LESSONS:

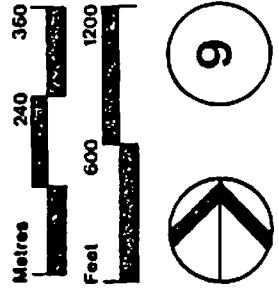
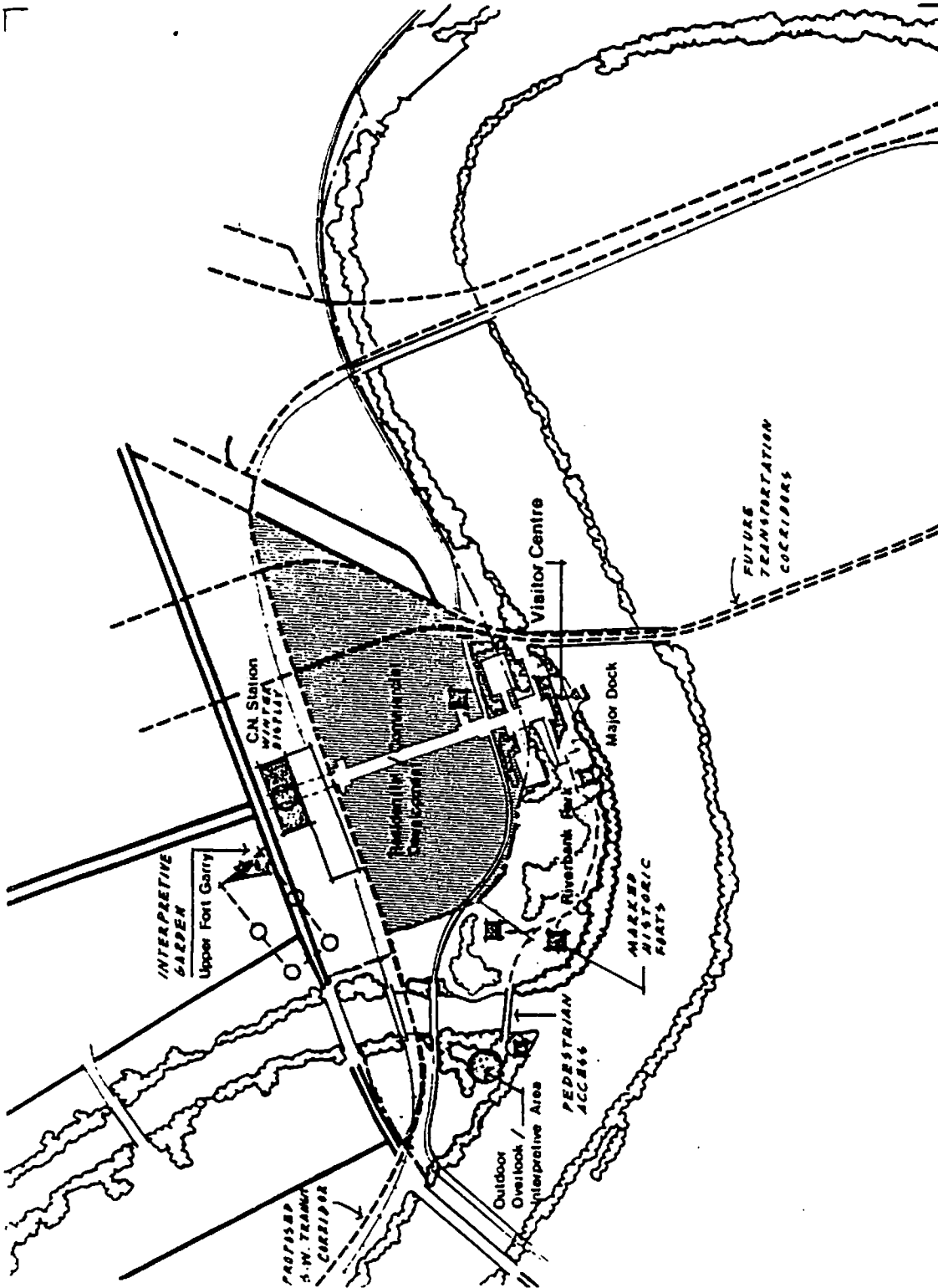
- visitor interpretive centre located on the riverbank and on the axis of Broadway would locate the facility near the foot of Provencher Bridge; if other activities are developed in the East Yard (to draw people into the development), then a more optimum location for the VIC facility may be closer to the Forks and further from the noise, air, and visual pollution of the Provencher Bridge.

Source: Hilderman Feir Witty and Associates. Draft Master Development Plan: Canada-Manitoba Agreements for Recreation and Conservation on the Red River Corridor. Winnipeg, Manitoba. 1980.

A.R.C.

RED RIVER CORRIDOR

The Forks north point alternative



A.R.C. PROPOSAL - SOUTH POINT ALTERNATIVE

PROPONENT: A.R.C. Management Board

YEAR: 1980

COVERAGE: total site including South Point (north to Water Avenue)

DEGREE OF PLANNING DEVELOPMENT: site plan and costing estimates

MAIN FEATURE: residential/commercial park development with visitor interpretive centre

PRIVATE/PUBLIC SECTOR ORIENTATION: riverbank park and interpretive centre are public developments

MAIN COMPONENTS

Retail: unspecified

Office:

Housing: unspecified type and amount

Park: 30 acres (South and North Point)

Cultural/Tourism: visitor interpretive centre on South Point. Passive park and parking on North Point.

Other: marked historic Forks/CN Station display/Upper Fort Garry display

MAIN TRANSPORTATION NETWORKS

York/St.Mary Extension: included in site plan

North/South Drive:

Other: included in site plan; runs across South Point to a twinned Norwood Bridge

Status of Pioneer and Water: appear to remain open

APPROACH TO RIVER FRONT: hard face at VIC
passive park on the remainder of the site

SEASONALITY OF PUBLIC USES: separation of parking from VIC
discourages winter use of VIC

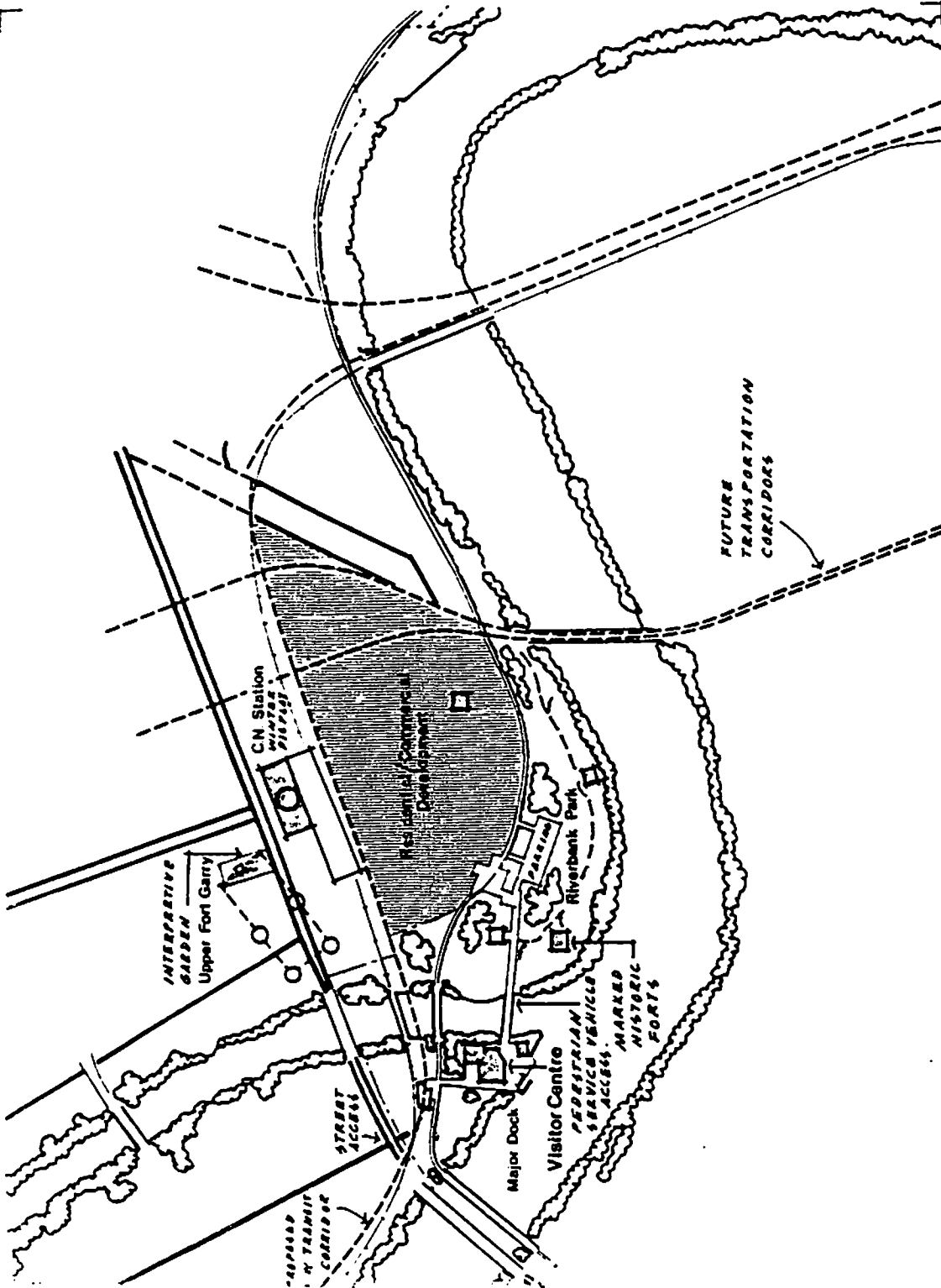
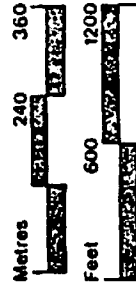
LESSONS:

- unless adequate parking can be accommodated off Main Street at the South Forks, this location for the VIC would discourage winter use.

A.R.C.

RED RIVER CORRIDOR

The Forks
south point
alternative



A.R.C PROPOSAL - CENTRAL PARK ALTERNATIVE

PROPONENT: A.R.C. Management Board

YEAR: 1980

COVERAGE: park covers entire site north to Water Ave.

DEGREE OF PLANNING DEVELOPMENT: site plan and costing estimates

MAIN FEATURE: passive park with visitor interpretive centre

PRIVATE/PUBLIC SECTOR ORIENTATION: all public

MAIN COMPONENTS

Retail: - -

Office: - -

Housing: - -

Park: 76 acres

Cultural/Tourism: visitor interpretive centre (8 acres)

Other: multi-modal transportation centre

MAIN TRANSPORTATION NETWORKS

York/St.Mary Extension: included in site plan

North/South Drive:

Other: included in site plan; runs across South Point to a twinned Norwood Bridge

Status of Pioneer and Water: appear to remain open

APPROACH TO RIVER FRONT: hard face at VIC
passive park on the remainder of the site

SEASONALITY OF PUBLIC USES: summer use park; year round VIC

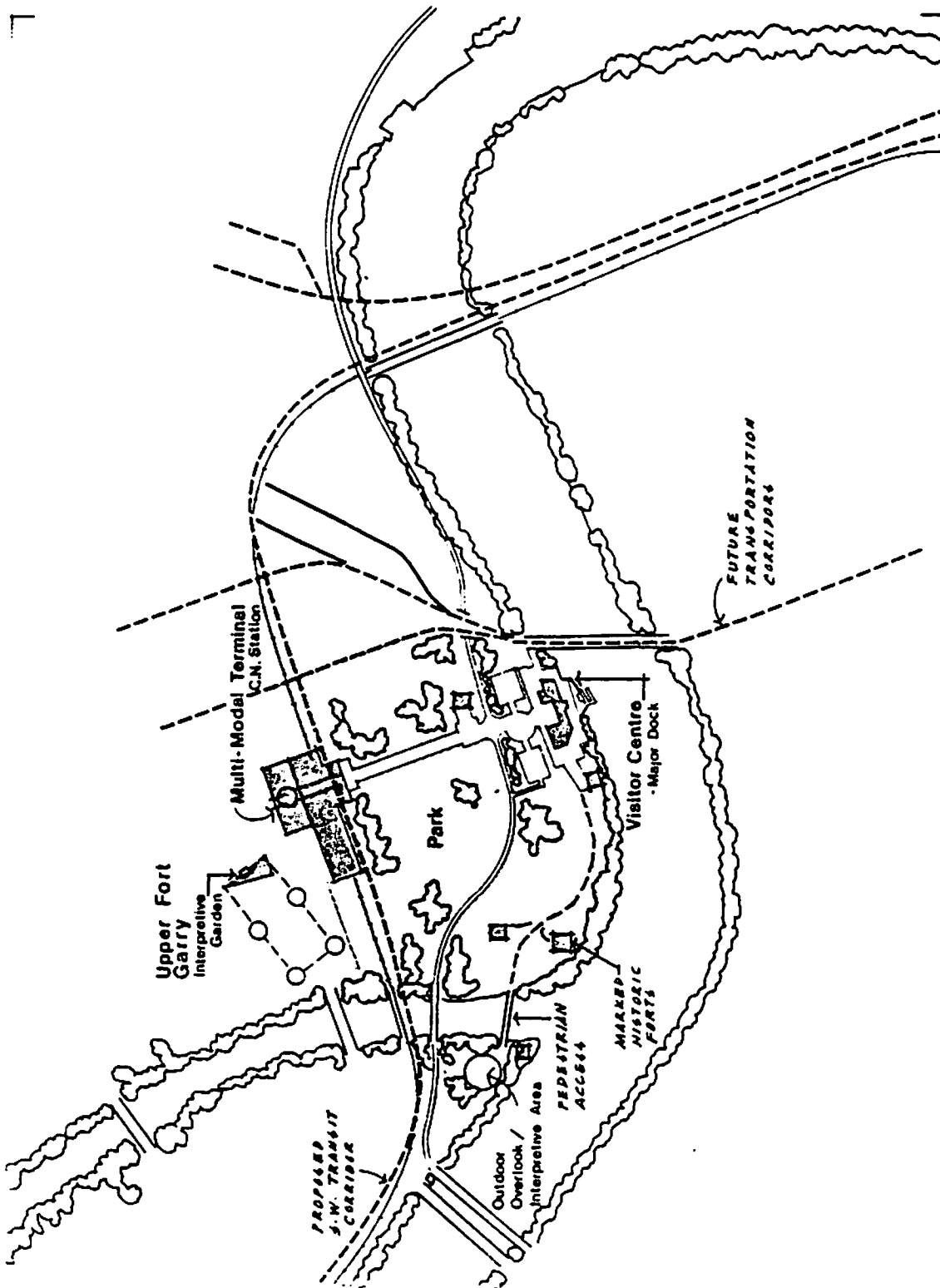
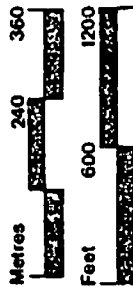
LESSONS:

- The inclusion of this all park scenario reflects a perceived public interest in consideration of this type of scheme. The high cost related to potential land use and value is the perceived drawback. As implied in the A.R.C. description of this proposal, public desire for an all park scheme would have to be strong enough to overcome this drawback.

A.R.C.

RED RIVER CORRIDOR

The Forks
central park
alternative



A.R.C. PROPOSAL - OFF THE FORKS ALTERNATIVE

PROPONENT: A.R.C. Management Board

YEAR: 1980

COVERAGE: South Point/Bonnycastle Park/Upper Fort Garry/CN station (No East Yard Development.)

DEGREE OF PLANNING DEVELOPMENT: site plan and costing estimates

MAIN FEATURE: no development in the East Yard

PRIVATE/PUBLIC SECTOR ORIENTATION: riverbank park and interpretive centre are public developments

MAIN COMPONENTS

Retail: unspecified

Office: --

Housing: unspecified type and amount

Park: South Point and/or Fort Garry interpretive garden.

Cultural/Tourism: visitor interpretive centre and/or Upper Fort Garry interpretive displays and/or CN

Other: Station interpretive centre
Marked historic Forks/CN Station display/
Upper Fort Garry display

MAIN TRANSPORTATION NETWORKS

York/St.Mary Extension: no

North/South Drive: no

Other:

Status of Pioneer and Water: remains

APPROACH TO RIVER FRONT: no river access in East Yard.

SEASONALITY OF PUBLIC USES: degree of winter use depends on the location of the visitor interpretive centre

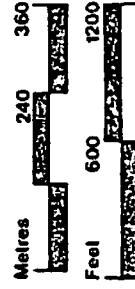
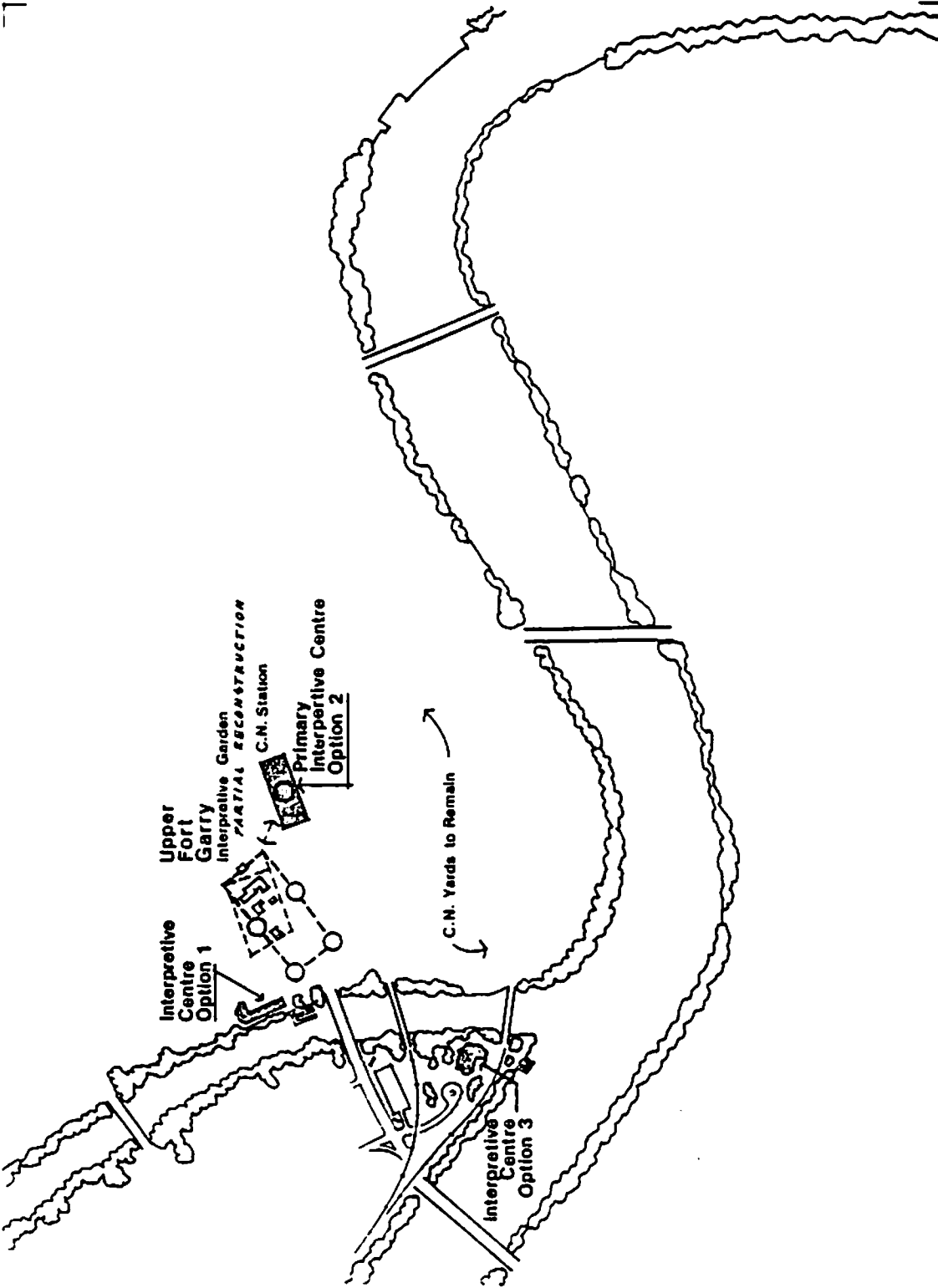
LESSONS:

- Visitor interpretive centre is possible in locations other than the East yard, although the primary focus on the river Forks is lost unless the centre is located either in the East Yard or the South Point.

A.R.C.C.

RED RIVER CORRIDOR

The Forks off the forks alternative



12

DRIE PLAN (very limited documentation available)

PROPONENT: Government of Canada

YEAR: 1985

COVERAGE: southern portion of East Yard only

DEGREE OF PLANNING DEVELOPMENT: preliminary concept only

MAIN FEATURE: river front oriented, multicultural/tourism development

PRIVATE/PUBLIC SECTOR ORIENTATION: public sector lead with various publicly sponsored facilities and programs

MAIN COMPONENTS

Retail:

Office:

Housing:

Park: substantial acreage integrated with cultural/tourism facilities

Cultural/Tourism: farmers' market, river festival area, multicultural centre, tourism pavilion, rail museum, marina, amphitheatre, forum (renovation of many existing buildings)

Other:

MAIN TRANSPORTATION NETWORKS

York/St. Mary Extension: no

North/South Drive: no

Other: extension of Gilroy via Cass

Status of Pioneer and Water: remain open

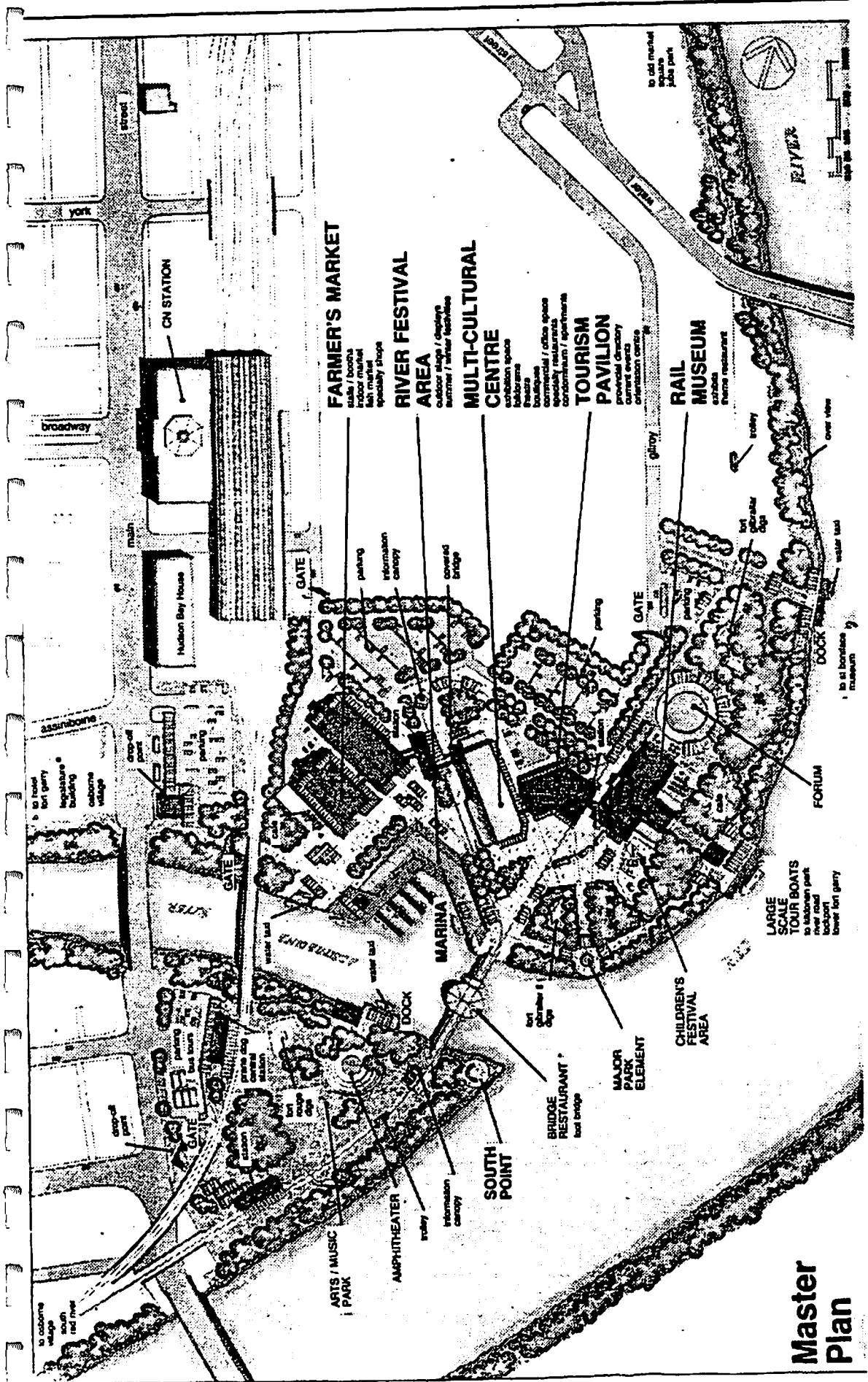
APPROACH TO RIVER FRONT: river front is focal point of proposed developments; intensive use of river front

SEASONALITY OF PUBLIC USES: some year-round facilities but much emphasis on summer oriented uses

LESSONS:

- even schemes emphasizing renovation of buildings will be reasonably costly (\$30-40 million)
- main attraction to East Yard needs to be determined to make multicultural/tourism development work well
- partial plan for site may compromise overall site development
- need to assess the re-use potential and structural soundness of existing building
- historical interests are sensitive to river front alterations

Source: Smith Carter Partners. Site plan prepared for DRIE. Winnipeg, Manitoba. 1985.



Master Plan

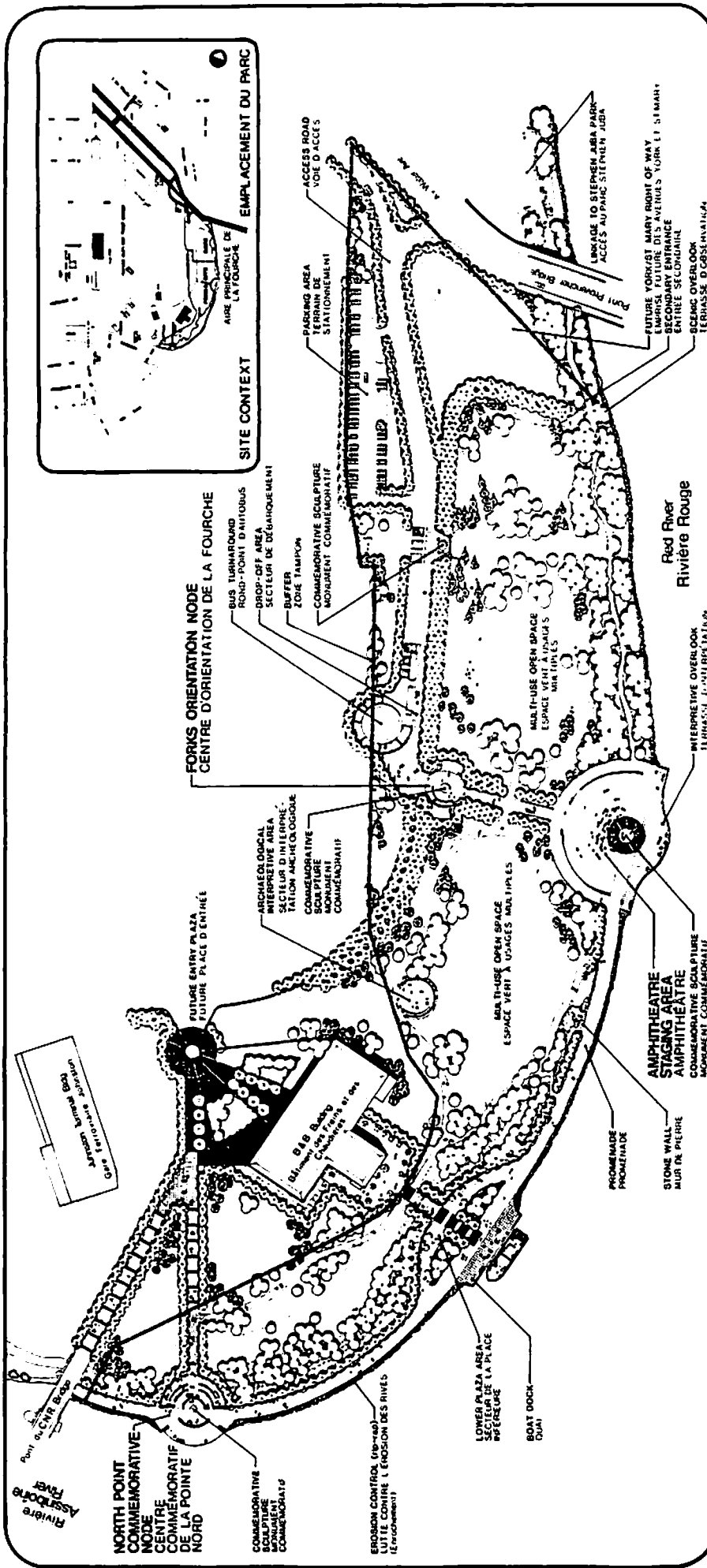
PARKS CANADA PLAN

PROPONENT: Parks Canada
YEAR: 1986
COVERAGE: approximately nine acre river front area
in southeast portion of the site
DEGREE OF PLANNING DEVELOPMENT: concept well advanced
MAIN FEATURE: national historic park, low intensity park
and historic oriented development
PRIVATE/PUBLIC SECTOR ORIENTATION: public sector sponsored
MAIN COMPONENTS (Phase 1 - construction to begin in 1987)
Retail:
Office:
Housing:
Park: substantial open space and pedestrian walk-
ways and promenade
Cultural/Tourism: amphitheatre stage area, commemorative
area, archaeological interpretive area,
extensive theme-related events and activi-
ties
Other: boat dock
MAIN TRANSPORTATION NETWORKS
York/St.Mary Extension: no
North/South Drive: no
Other: extension of Cass Street
Status of Pioneer and Water: remain open
APPROACH TO RIVER FRONT: river front is focal point
SEASONALITY OF PUBLIC USES: park and facilities are summer oriented,
although some proposed events occur in
winter

LESSONS:

- most advanced element in planning of East Yard, must be considered in plan-
ning rest of East Yard
- likely low use area if developed alone, use could be greatly increased with
further development of East Yard and introduction of Phase 2 interpretive
and theme facilities
- cost of river bank stability may influence choice of hard or soft edged plan-
ning approach
- cost of basic site upgrading for parkland now a known factor
- identifies key river bank development focus points

Source: Lombard North Group Ltd. The Fork Site Development Plan prepared
for Parks Canada. Winnipeg, Manitoba. 1986.



THE FORKS LA FOURCHE

ENVIRONMENT CANADA - PARCS • ENVIRONNEMENT CANADA - PARCS



SCALE
ÉCHELLE
1:500
METRIC
MÉTRIQUE

0 10 50 75

North
Nord

LOMBARD NORTH GROUP
L'AMBIANT ARCHITECTURE PLANNING ENGINEERS
SCENARIOS MANAGERIAUX

DRAFT DOWNTOWN ZONING BYLAW**PROPONENT:** City of Winnipeg**YEAR:** 1986**COVERAGE:** all of downtown Winnipeg, including the entire East Yard (other than the South Point)**DEGREE OF PLANNING DEVELOPMENT:** regulatory proposal**MAIN FEATURE:** identifies four different principal use areas**PRIVATE/PUBLIC SECTOR ORIENTATION:** regulatory**MAIN COMPONENT:** proposed regulation of uses**Retail:** restricted**Office:** proposed in 2 areas**Housing:** proposed in 1 area**Park:** proposed along riverfront**Cultural/Tourism:** not explicitly highlighted**Other:** restrictions on height (7 storeys) except in York-St.Mary "island", and restriction of Floor:Area ratio (5) except in York-St. Mary "island" (6 permitted if provide for approved walkways)**MAIN TRANSPORTATION NETWORKS****York/St.Mary Extension:** yes (priority area for commercial)**North/South Drive:** no comment**Other:** no comment**APPROACH TO RIVER FRONT:** riverfront park use; all uses require approval**SEASONALITY OF PUBLIC USES:** encourage all-weather pedestrian access, design approval for pedestrian access**LESSONS:**

- integrates East Yard with Winnipeg downtown zoning and planning
- proposed by-law represents significant change from previous zoning and land use by-laws in Winnipeg
- park areas: any development would be conditional upon City approval
- residential area: use would be generally restricted to residential purposes (residential would not be a permitted primary or secondary use in any other East Yard area)
- non-residential areas: would allow office and various other commercial uses; however, retail would be restricted to secondary uses

ST. MARY EXTENSION

YORK EXTENSION

BROADWAY

ASSINIBOINE AVE.

ST

MAIN

UNION
STATION

RED

RIVER

Non-Residential Area
-Min.Height - 2 floors
-Max.Height - 7 floors
-Max.F.A.R. - 5

Non-Residential Area:
-Min.Height - 4 fl.
-Max.Height - none
-Max.F.A.R. - 5-6

Residential Area:
-Min.Height - 2 floors
-Max.Height - 7 floors
-Max.F.A.R. - 5

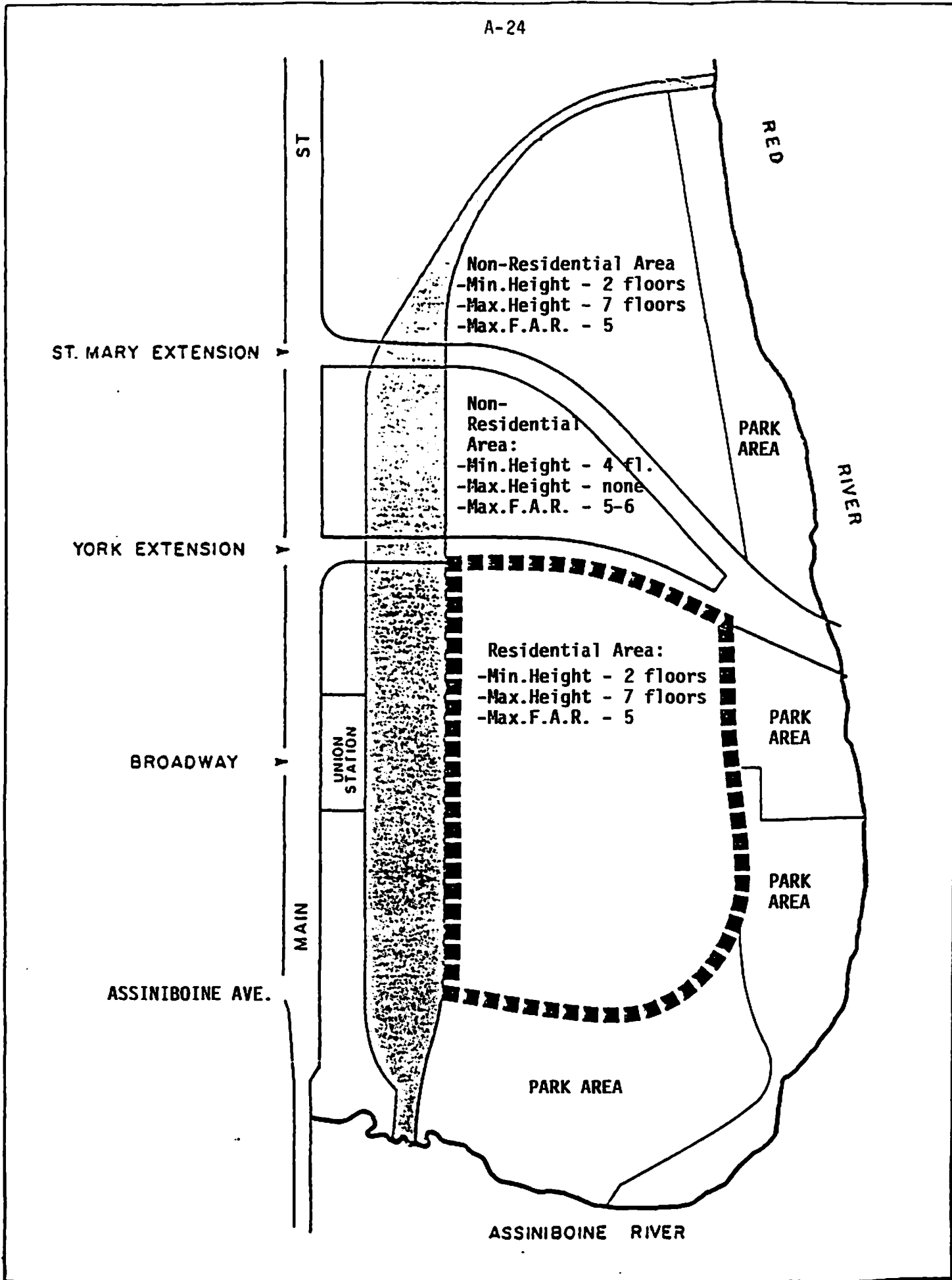
PARK AREA

PARK AREA

PARK AREA

PARK AREA

ASSINIBOINE RIVER



ATTACHMENT B

SUMMARIES OF
FOUR CANADIAN REDEVELOPMENT EXPERIENCES

Name: WINNIPEG CORE AREA INITIATIVE CORPORATION

Purpose: To provide overall management and supervision of programs and projects implemented under the CAI Tripartite Agreement; to prepare plans and studies; to manage the public information process; to consult with the public; to evaluate CAI programs; and to administer funds provided through the CAI Agreement; to prepare annual reports; to implement certain programs under agreement with various implementing jurisdictions.

Land Arrangements: The CAI Corporation may enter into property arrangements although to date it has not done so. All property action to date has involved inputs from the CAI Corporation but land is held by either the Province or the City and action is taken by these parties upon the advice of the CAI administrative process.

Financial:

1. There is no authorized capital in the Corporation and it is not entitled to pecuniary gain.
2. The three levels of government have no proprietary interest in the Corporation.

Legal Authority: The CAI Corporation is a private, non-profit Corporation under Sub-section 136(1) of the Corporations Act (Manitoba).

Term: The Corporation exists in perpetuity.

Board: There are three voting members of the Corporation which include the General Manager, the Assistant General Manager, and the Legal Counsel for the Corporation.

History: The CAI Corporation was established on July 23, 1982 for the purpose of creating an entity capable of entering into contractual arrangements with the three levels of government for the purpose of co-ordinating the Agreement, etc.

Comments:

1. The CAI Corporation is a limited purpose entity to give focus and provide co-ordination to the Tripartite Agreement. The Corporation carries out its mandate

under contract to the implementing jurisdiction for Program 12: Management, namely Canada, under a contribution Agreement. The Corporation also delivers certain other programs under contract to various implementing jurisdictions within the scope and financial limitations of the CAI Agreement.

2. The effective decision-making structures under the Tripartite Agreement include: (a) the Policy Committee, made up of the Mayor, and the signatory federal and provincial Ministers; and (b) the Management Board, made up of senior officials of the three levels of government.
3. The CAI Corporation plays a well-defined and specific role within the context of the tri-level agreement as it applies to land-related projects. Specific land-related developments have been done in a variety of ways, e.g., North Portage redevelopment through a separate Corporation; housing projects through a combination of Core Area grants but with lands held by the City and with action upon the recommendations of CAI Corporation.
4. The CAI decision-making structures are public sector directed, except where there are community based advisory boards. The CAI Corporation is sensitive to public sector policy issues and its decision-making framework is under continuous public scrutiny and review.
5. Without tri-level consensus, the CAI Corporation cannot act independently or expeditiously. The capacity of any level of government to veto a project or proposal can hinder the approval process, e.g., Logan. Conversely, consensus can expedite the implementation process, e.g., NPDC.
6. The decision-making structure of the CAI is involved both in the pre-planning of the Agreement, its constituent programs and managing the implementation process as well. There are no members of the community at large on the Policy Committee or the Management Board.
7. The CAI decision-making and implementing arrangements are based on tri-level consensus for co-ordinating and approving a wide and varying range of public programs.

Name: NORTH PORTAGE DEVELOPMENT CORPORATION

Purpose: To redevelop the North of Portage area in downtown Winnipeg by a combination of public, private and institutional investment. The project calls for a mixed-use approach involving retail, commercial, housing, office, hotel, institutional, and public sector projects on public lands.

The size and scope of the plan is spelled out in a Unanimous Shareholders Agreement between the three levels of government which includes an approved Concept and Financial Plan.

Land Arrangements:

1. Lands were acquired by the Province of Manitoba under its Expropriation Legislation and transferred to the North Portage Development Corporation.
2. Lands are held by NPDC which, in turn, is owned equally by the three levels of government.
3. Lands are to be leased and may not be sold without the prior approval of shareholders.

Financial:

1. Capital program of \$76 million, of which \$71 million is funded through grants. This funding is projected to lever approximately \$260 million of private and institutional development (Phase I) within the project area.
2. No ongoing operating subsidies are provided.
3. Borrowing authority restricted at \$20 million.
4. The 1985/86 year-end financial statements estimate land expropriation commitments at \$30 million; in addition, contractual commitments of approximately \$31 million have been made to date with respect to infrastructure, retail and office developments. Deferred development costs to date approximate \$2.2 million, and annual expenses approximate \$0.5 million (excluding development program costs).

Legal Authority:

1. A community development corporation under part XXI of the Corporations Act (Manitoba).

Term:

1. NPDC exists in perpetuity but its Phase I mandate is a five year term ending December 1988.

- Board:**
1. 10 member Board of Directors
 2. 1 Chairman appointed unanimously
 3. 3 Directors appointed by each shareholder
 4. Term of appointment is 3 years initially with rotating appointments of 1, 2, and 3 years after December 1986.
- History:**
1. Task Force developed initial plan August 1983.
 2. Board established December 16, 1983.
 3. Final Concept Plan approval June 1984.
 4. President starts November 1984; call for proposals.
 5. Letter of Intent executed with retail and housing developer in January 1985.
 6. Agreements with retailers and office developers executed in November 1985.
 7. Arrangements for IMAX Theatre with public sector approved in May 1986.
 8. Agreement with housing developer to be executed in July 1986.
- Comments:**
1. NPDC is an implementing authority with representation on the Board from the community at large appointed by each level of government. No civil servants or politicians are eligible for Board appointment.
 2. NPDC retains maximum flexibility as to its own internal organization, budgeting and the process of seeking and approving development proposals (subject only to the approved Plan and the Agreement).
 3. NPDC holds, manages and develops property.
 4. After development is completed, NPDC will generate sufficient land lease revenue to sustain its organizational costs and will generate a surplus in the future.
 5. NPDC is treated as any other developer with respect to the City of Winnipeg development approval process,

but has the advantage of accessing the political process to help it meet its objectives.

6. NPDC is an established organization, with a defined plan and budget which allows it to pursue its purposes with singular determination.
7. Other than moral suasion by its staff and Board, NPDC plays only a limited role in design and planning of specific projects.
8. NPDC's experience with respect to public sector components in its program has revealed various problems related to funding, finalization of public sector commitments, and ongoing co-ordination with various government groups.

Name: GRANVILLE ISLAND

Purpose: To develop and manage a mixed-use development on 42.5 acres of land and water lots in False Creek near downtown Vancouver involving a variety of public, cultural, artistic, recreational and complementary commercial enterprises.

Land Arrangements: Ownership of the land was acquired discreetly by the Federal government in 1972 and the land was transferred from the National Harbour Board to CMHC in 1973.

The entire site is a federal "enclave" and is not subject to municipal bylaws and controls.

Financial: \$25 million was approved by Canada for the purchase of industrial leases and for development costs; only \$19.5 million was actually retained.

Term:

1. The land ownership is continuous.
2. The nature of the structure to run the project is still under review.

Board:

1. The initial structure in 1972 was a steering committee made up of Federal and city officials who utilized consultants to undertake the planning work.
2. A five member Trust succeeded the steering committee in 1976. The Trust is an advisory body to CMHC. Representatives include one city appointee, one federal (the Chairman), and three members at large.
3. In 1979, the Trust was expanded to seven members to respond to the City's concerns that there be more local input.
4. No formal charter was ever established for the Trust and it has no legal authority for the Island. Its effectiveness was based on its direct reporting relationship of the responsible federal minister.
5. Decisions on the operations and development of Granville Island were made jointly by the Trust and the Project Manager. All recommendations in the early years were approved by the administrative system in Ottawa without substantial involvement.

6. By 1985, the Trust membership changed and the new Regional Director for CMHC brought the Trust closer under CMHC control, which continues to manage the project. Currently, the Island is being managed on an interim basis and options for the future of the project and its organizational arrangements are under review.

History:

1. Granville Island was the federal western urban initiative counterpart to Harbourfront. The strength of the project was the political freedom and flexibility with the involvement of strong local individuals, to get the job done with a minimum of bureaucratic interference and red tape.
2. The goals of the Granville Island plan were:
 - (a) not compete for development which might locate in other parts of Vancouver;
 - (b) Granville Island should be directed to serve Vancouverites and not be conceived as a tourist attraction;
 - (c) it should provide a long term location for the artistic and cultural community;
 - (d) public access to the waterfront should be assured and publicly oriented activities should predominate;
 - (e) the Island should contain a mix of all land uses including office, retail, industrial, entertainment, community facilities, hotels and parks. No housing is permitted on account of adjacent residential development in False Creek;
 - (f) the development should occur incrementally.
3. In 1972, consultants for the Steering Committee prepared a plan to the Island which recommended a mixed use approach. This was studied further and by 1978 the Granville Island Redevelopment Plan was completed. However, the federal minister decided that the Plan would not be subject to municipal regulations even though it went through the local planning process.
4. The planning guidelines provided to developers were very general and required them to work with the Island's architect. The only publicly funded project by the Trust was the Public Market which was a resounding success financially and as an attraction.

Other projects undertaken included the establishment of several theatres, artists' studios and galleries using renovated buildings. As well, the B.C. government located a \$6 million College of Art on the Island.

Comments:

1. In summary, Granville Island is a rich combination of private, public, cultural and commercial facilities with only a hotel and a boathouse community for residential use. The Island is lively during the day but not at night.
2. The decision to create a concentration of cultural activities focused on theatres and the Arts was well founded. None of this activity is "programmed" as in Harbourfront.
3. The speed and success of the development was facilitated by the informal organizational structure reporting to a sympathetic minister. However, as he moved on, the bureaucracy has taken over the project and no final disposition of the organization has been determined. By this time, however, most of the developments have already taken place.
4. The use of local people in defining and implementing the development concept was important to the organizational structure which was suited to expediting the early development phase. After development, the weakness of this structure was the lack of a mechanism for dialogue with "tenants", particularly in the successful Public Market.
5. The financial aspects of the project are highlighted as follows:
 - (a) there were existing revenue generating leases in place from the start of the project;
 - (b) only \$2.5 million was invested for the construction or rehabilitation of buildings, e.g., the Public Market. \$11.5 was expended for infrastructure, \$55 million for lease re-purchase. The balance of the development (\$60 million) was undertaken by private investment, the provincial government and private developers;
 - (c) the Island benefits financially from not undertaking any programming of artistic or entertainment activities on its own. It only spends ongoing funds in the administration and maintenance of the lands;
 - (d) in 1983, revenues were as follows (approximate):

- Public Market	\$ 1,000,000
- Rentals:	
Commercial	400,000
Cultural & Institutional	180,000
Industrial	270,000
- Other	150,000
 - (e) operating costs are budgeted to equal revenue; salaries for the 30-person staff account for about 40% of these costs.

- Name:** HARBOURFRONT
- Purpose:** To redevelop and manage a 100 acre waterfront area in Toronto.
- Land Arrangements:** Lands were acquired by expropriation by the federal government and are still held by Canada.
- Financial Arrangements:**
1. Between 1972-79, the Department of Public Works provided funds to the project.
 2. A total of \$135 million of federal funds will be spent from 1972 to 1986/87 with \$55 million for land.
 3. Canada underwrites operating losses to Harbourfront and the project has yet to reach self-sufficiency (since 1978, \$8.5 million for operating losses).
- Legal Authority:**
1. The establishment of the Harbourfront Corporation in 1976 was under the Ontario Corporation Act. Harbourfront acted on contract to DPW to manage and develop the property.
 2. An Act of the Parliament of Canada created Harbourfront as a Crown Corporation in 1984.
- Term:** The Crown Corporation's life is continuous, at the pleasure of the federal Crown.
- Currently, there is a proposal to change the Crown Corporation to a tri-level Foundation or Trusteeship for the purpose of giving it greater financial flexibility.
- Board:**
1. Initially, while Harbourfront was a Corporation, there was a 9 member Board of Directors, appointed by the Minister of Public Works, the sole shareholder. Two members of this Board were appointed on the recommendation of the Mayor of Toronto and the Chairman of Metropolitan Toronto. The Premier's executive assistant attended Board meetings but this was an informal arrangement.
 2. The Crown Corporation is structured in the same manner as previously and there has been no change in its management and development mandate.
- History:**
1. Harbourfront had a difficult start based on ill feelings between the federal, provincial and city governments

on account of Canada's unilateral action to acquire the lands. Even though lands were acquired in 1972, it took until 1978 before there was sufficient consensus and organization in place to begin significant development.

2. From 1972 to 1975, various federal working teams undertook project planning and consultation. By 1975, a Harbourfront Council was appointed by MSUA in conjunction with the Chairman of the Municipality of Metro Toronto and the Mayor of Toronto. The Council included 15 citizens appointed at large, one official from each of the three governments involved and two senior Harbourfront staff. The structure of the Council was informal.
3. In 1976, the Council published its report, Harbourfront Corporation, which outlined the future use of the site including principles of operation, organization, finance, design and site use. As well, a Corporate structure was recommended, including a Board to be chosen from the public at large.
4. By July 1978, the federal appointed project manager and co-ordinators left and the Harbourfront Board hired Howard Cohen as General Manager.
5. The original plan prepared by the federal team, which involved a broad public consultation process, was never implemented. In 1978, Cohen introduced a new plan, Harbourfront Development Framework as guide to the development of the site.

The Plan encouraged a broad mix of urban uses and activities with siting of public projects carefully arranged to frame the public outdoor realm. Although public activity was clearly emphasized, the plan also called for varied residential and commercial components to generate year-round population.

6. An early activity, which has grown to become a central feature of the development, was public programming, which started modestly in 1973 and has grown to include community and special events, visual arts, performing arts, education and recreation. In 1985, cost of programming was \$4 million, of which \$1.7 million covers basic costs and \$2.3 million covers events production. Approximately \$600,000 of these costs were recovered through admissions and \$1 million through sponsorships.
7. On the physical side, the development began in 1976 with the Antique Market and a number of other public funded projects which focused on public activities.

In 1978, proposal calls to developers were issued, including detailed design guidelines, and by 1980 the Terminal Warehouse (Queen's Quay) development was started.

Current private developments under construction include:

- (a) King's Landing - condos, office, recreational and retail facilities (\$100 M)
- (b) Harbour Terrace Development - condos (\$17 M)
- (c) Hotel plus condos and retail space (\$93 M)
- (d) a mixed commercial/residential development (\$24 M)
- (e) 3 non-profit co-ops at Bathurst Quay
- (f) Harbour Point residential development in 3 towers (\$30 M)

Nearly all projects will be completed this year.

Comments:

1. While Harbourfront is considered a success story, the lack of tri-level governmental consensus delayed the development of an acceptable plan and organizational structure for six years. Major physical redevelopment also did not start for four years. The 1983 federal Special Capital Recovery Program (SCRCP) added further impetus to redevelopment. Until there was tri-level consensus developed, the project was an embarrassment for the federal government.
2. The Corporation has not yet reached financial self-sufficiency although it generates about \$9.2 million in annual revenues; there is still an annual shortfall of \$350,000, and operating costs have tended to rise faster than income.
3. Under the Crown Corporation structure, it faces substantial constraints on how it can invest and use its accumulated surplus. Currently, it is seeking to become a Foundation, mainly to give it greater financial flexibility.
4. The federal government incurred substantial ongoing operating costs which it has carried since 1972.
5. The major lesson from Harbourfront is that there should be consensus by three levels of government on the following:
 - (a) a flexible plan
 - (b) financing
 - (c) organizational structure.
6. Harbourfront was one of the slowest and most costly public projects of those reviewed.

ATTACHMENT C

PRELIMINARY SOILS INVESTIGATION

PRELIMINARY SOILS INVESTIGATION

In August and September 1986, Independent Test-Lab Limited of Winnipeg conducted a preliminary soils investigation of the lands in the East Yard that would be transferred to the public body. Soil samples were taken at eleven locations to determine in general the soil characteristics of the site and to identify any ground pollution left from industrial use of the site (see Figure C-1). The eleven test holes were located throughout the site to obtain a representative indication of soil conditions. No holes were drilled where surface structures existed as this was not technically possible.

Notable findings and conclusions of this investigation are as follows:

A. Soil Conditions

1. Soil conditions are highly variable across the entire site. The different types of soil strata encountered are as follows:
 - Man-made, random and railway-related fill
 - Silty clay fill
 - Alluvial sand, clayey and silty
 - Alluvial clayey silt
 - Lacustrine clay, silty and sandy
 - Glacial tillMan-made fill materials were found throughout the site.
2. As shown in Tables C-1 and C-2, man-made fill materials ranging from 0.12 to 3.0 metres in thickness were encountered although most of the site has less than 1.22 metres. The exception is in the northeast corner where BACM used to operate a concrete plant.
3. As shown in Table C-3, ground water occurs throughout the site at depths ranging from 3.0 to 11.0 metres. In most cases, ground water depth is between 4.9 and 6.7 metres.
4. Ground pollution of major concern was not encountered. With the exception of two test holes, the man-made fill materials were relatively free of industrial pollution. Traces of diesel fuel odour and pieces of tar and rotten wood with a foul odour were found respectively in the remaining two test holes which were both located in the northern part of the site. The latter materials are probably associated with the former BACM concrete batch plant that was located in the northeast corner in the 1960s. Specialized testing for industrial pollutants is not recommended at this time although it should be noted that the possibility of ground pollution in localized areas, such as under some of the tracks, cannot be precluded.

TABLE C-1

MAN-MADE FILL MATERIALS IN EAST YARD TEST HOLES

Test Hole #	Thickness	Description
1	0.12 m 0.95 m	- gravel with stones up to 40 mm - cinders, ashes, railroad refuse, etc. with gravels and stones
2	1.22 m	- cinders, ashes, etc., black/grey in colour, with gravels and stones
3	0.34 m	- cinders, granular, etc.
4	0.40 m	- cinders and ashes, etc.
5	0.76 m	- cinders, bricks, dirty gravel, etc., with silt and clay lumps
6	0.50 m 0.72 m	- railroad ballast - clay and gravel fill, black, organics, pieces of wood, with trace of diesel fuel odour
7	0.12 m 0.34 m	- sand and gravel - cinders, gravels, etc.
8	3.00 m	- silty clay fill, brown, with stones up to 1.2 m, alkali pockets and large silt layer
A	0.12 m	- cinders and ashes
B	0.15 m	- cinders and gravel, black
C	0.91 m 1.98 m	- gravel rubble, sand with gravel - cinders, ashes, asphalt, oil, etc., large pieces of tar, rotten wood, with foul odour

TABLE C-2

FREQUENCY DISTRIBUTION OF THICKNESS OF MAN-MADE FILL MATERIAL

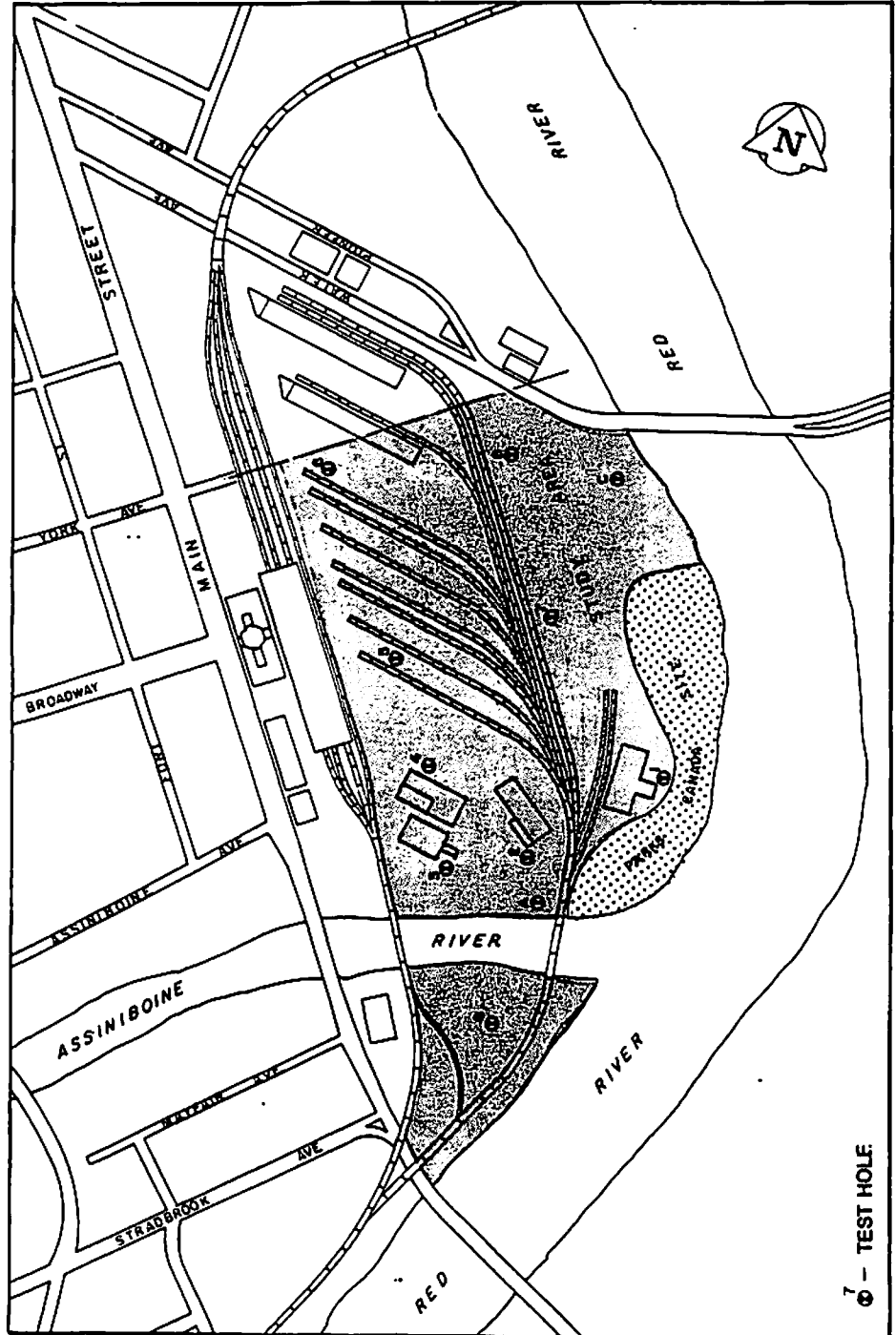
<u>Thickness</u>	<u>Number of Test Holes</u>
.12 - .46 m	4
.72 - 1.22 m	5
2.89 - 3.00 m	2

TABLE C-3

DEPTH OF GROUNDWATER IN EAST YARD TEST HOLES

<u>Test Hole #</u>	<u>Depth of Groundwater Inflow</u>
1	6.7 m
2	4.9 m
3	5.5 m
4	4.6 m
5	5.2 m
6	4.9 m
7	3.0 m
8	11.0 m
A	10.4 m
B	4.6 m
C	5.8 m

FIGURE C-1



LOCATION OF EAST YARD TEST HOLES

○ - TEST HOLE

B. Implications for Development

1. Depending on loading requirements and the nature of structures, both shallow and deep foundations can be considered for foundation support. Detailed investigation of soil conditions is warranted prior to any structural foundation design.
2. Pavement structures should recognize the existence of man-made fill and problems related to frost action, and the extremely low support strengths of silt subgrade in the spring. Flexible pavements are preferred to road pavements.
3. Extra care in the installation of utilities will be needed where they are below the saturated zone of alluvial silt soil or below the water table.
4. The riverbank between the East CNR Bridge and CNR Main Line Bridge is unstable to marginally stable. Priority must be given to stabilizing this section of the riverbank before any future site development. Suitable stabilization could cost up to \$250,000.

ATTACHMENT D

RIVERBANK STABILITY AND STABILIZATION REQUIREMENTS

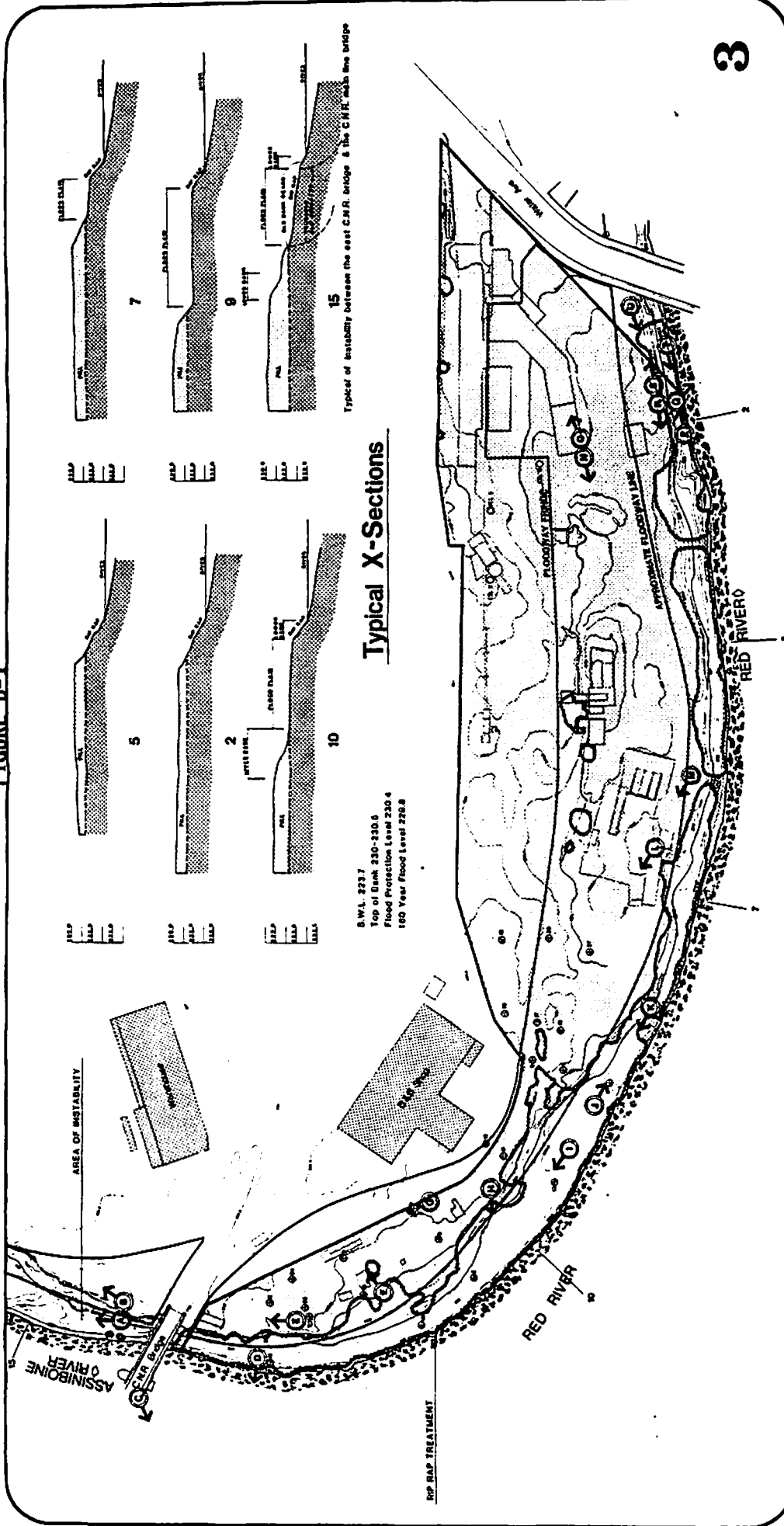
RIVERBANK STABILITY AND STABILIZATION REQUIREMENTS

The banks of the Red and Assiniboine Rivers in the East Yard are subject to varying degrees of instability and requirements for bank stabilization.

1. On the Assiniboine River between the Main Line and Transfer Track: This is the worst area along the East Yard shoreline for earth slumping and slippage. It must be stabilized before any redevelopment can occur. Cost of stabilization will be high as elaborate structural works will be needed, potentially costing up to \$3,000/metre for a total cost of up to \$250,000.
2. Along the length of the Parks Canada Site: Riverbank instability will be rectified by a 6 metre wide stone and cement promenade which Parks Canada plans to install with completion by mid-1988.
3. On the Red River between Parks Canada site and Provencher Bridge: This area is moderately unstable and likely requires rip-rap bank stabilization or modest structural work. Cost of stabilization would be \$40,000 to \$50,000.
4. On the Red River between the Provencher Bridge and the Main Line: There is no information on riverbank stability in this area. A walkway dike along the top of the riverbank serves as a link to Stephen Juba Park; stabilization probably isn't needed as long as the narrow strip between the walkway and the riverfront is not opened up.
5. South Point: Instability apparently exists at several locations on the South Point. If this area is maintained as a park, stabilization likely would not be needed. If it is to be developed, further investigation would be needed.

Figure D-1 reviews available analysis of bank stability along the north shore of the Assiniboine and the west side of the Red River, focusing on the site to be developed by Parks Canada.

FIGURE D-1



THE FORKS
PARKS CANADA · CANADA MANITOBA A.R.C. AGREEMENT
BANK STABILITY ASSESSMENT

LEGEND

- Flood Line Boundary
- Existing Bank Treatment
- ⊗ Proposed New Bank Treatment
- ⊕ Power Lines

SCALE 1:500
METRIC

0 50 75

North

LOMBARD NORTH GROUP
LANDSCAPE ARCHITECTS PLANNERS ENGINEERS
WINNIPEG MANITOBA CANADA

ATTACHMENT E

TRAIN NOISE RELATED CONSIDERATIONS

TRAIN NOISE RELATED CONSIDERATIONS

Trains will continue to travel over the main line during East Yard redevelopment. Currently an average of 50 to 55 trains per day use the main line during the spring and summer months at all times of the day. This is expected to continue and could conceivably grow in the future.

Housing and outdoor recreation are potential forms of development that could be significantly affected by this noise. Housing is obviously the principal concern since noise likely would be most intrusive for those people living in the site (especially at night).

Although noise may affect location and design (e.g., sheltering walls) for outdoor recreation spaces near the high line, this is of less concern since visits to a relatively noisy environment would be of short duration and thus less annoying to visitors. In fact, the noise could be considered a feature to be turned to advantage for some uses, e.g., a rail museum. Furthermore, people frequently voluntarily subject themselves to high levels of noise for recreation purposes (e.g., carnival midway); obviously, the type of recreation will have to be compatible with the expected noise levels (with possible attenuation considered) at various distances from the main line in the public body lands.

To understand the possible impact of noise on housing and outdoor recreation, the following assessment was carried out:

1. Noise levels were calculated on an "A" weighted decibel (dB) per 24 hour noise equivalent level (Leq(24)) using formulae developed by CMHC;
2. The calculated dBA Leq(24) noise levels were compared to standards established by CMHC for residential use.

The dBA Leq(24) measure reflects the average sound level expected over a 24 hour period and is "A" weighted to reflect the sound waves most audible to the human ear. The dBA measure is the most commonly used and is most representative of perceived noise. At some point, it will also be important to examine other time dimensions such as dBA Ldn which gives more weight to night-time noise and Leq(1) which looks at peak noise levels

expected at various times throughout the day and night. Actual noise testing would be required for these, as discussed later.

The raw data on train movements required for the calculations were obtained from the Planning and Research Department of CN. They reflect August 1985 rail traffic levels and are representative of the peak period for the year as spring and summer traffic levels are substantially higher due to heavy grain movements. CN feels that rail traffic will increase in the future, but the change could not be estimated.

Rail noise levels were calculated using the CMHC formulae as follows:

1. Calculate engine noise, assuming maximum of 20 mph, average of 25 and 45 cars/locomotive (depending upon calculation method) and at distances of 100 ft., 200 ft. and 300 ft. from rail line assuming a hard surface and no barriers. Effective height of noise source considered to be the height of track above yards (17 ft.) plus engine (15 ft.) plus receiver height (assume 6 ft.).
2. Calculate wheel/rail noise, assuming maximum of 20 mph, average of 2,500 cars per 24 hours, at distances of 100 ft., 200 ft. and 300 ft. from track, assuming a hard surface. Effective height of wheel/track noise considered to be the height of track above the yards (17 ft.) plus one foot plus receiver height (assume 6 ft.). This noise calculation would reflect estimated noise next to the public body portion of the track where the track is straight; additional noise would be experienced from squeal as the cars round the curves on the north portion of the site.
3. Normally whistle noise is also calculated but no whistles are used in the East Yard; bells are rung at the station but no information is available to estimate the contribution of this source to noise levels.
4. The engine and wheel/rail noise emissions are combined to determine the overall noise emission from the main line.

Table E-1 outlines the resulting noise levels.

The following criteria have been adopted by CMHC as maximum acceptable levels of road and rail traffic noise in dwelling and in outdoor recreation areas:

TABLE E-1
ESTIMATED UNATTENUATED NOISE EMISSIONS
FROM CN MAIN LINE ADJACENT TO
PUBLIC BODY LANDS, AUGUST 1985

Noise Source	dBA Leq(24)		
	100 ft. from centre line	200 ft. from centre line	300 ft. from centre line
Engine Noise			
low estimate	60	57	55
high estimate	63	60	58
Wheel/Rail Noise	<u>60</u>	<u>57</u>	<u>55</u>
Total Noise Emissions			
low estimate	62	59	58
high estimate	65	62	60

Source: Calculated using CN data and CMHC formulae.

	<u>Noise Level dBA Leq(24)</u>
Bedroom	35
Living, Dining and Recreation Rooms	40
Kitchens, Bathrooms, Hallways, Utility Rooms	45
Outdoor Recreation Area	55

On a 24 hour equivalent basis, the calculated noise levels all exceed standards established by CMHC for residential and outdoor recreation purposes.^{1/} The East Yard train noise levels of 55 to 65 dBA Leq(24) fall into CMHC's "Intermediate Zone", i.e., 55-75 dBA Leq(24) in which financing will be provided under the National Housing Act for home construction but only if adequate sound insulation is provided to attenuate noise.

Since it is possible for attenuation measures to achieve up to 20 dBA Leq(24) reduction in noise levels at the outside wall of a house nearest the noise source, it would be possible for housing to meet standards established by CMHC in the East Yard. Given the results outlined in Table E-1, obviously some set-back from the main line, preferably in the 200-300 ft. range would be desirable for any proposed housing development.

Various measures could be adopted to attenuate noise from the main line:

- build a barrier along the main line of sufficient height to deflect noise from housing in the East Yard
- build structures for uses not sensitive to noise (e.g., parking garage) along the high line (in continuous fashion) to block sound from reaching houses
- orient buildings so that the longest wall runs parallel to the main line to deflect sound (e.g., townhouse development)
- locate outdoor recreation areas and bedrooms on side of houses sheltered from noise
- locate tallest housing closest to main line; if opposite were done, noise would deflect from higher structure back onto lower houses
- avoid high rise housing (i.e., higher than barrier) which would not be sheltered by a barrier along main line
- construct homes using materials with good sound insulation value (e.g., solid vs. hollow core outside doors, triple pane windows)

- if possible, use soft surfaces (e.g., grass) to absorb noise between main line and housing
- plantings unfortunately have very little attenuation value and would not be sufficient shelter from noise.

When undertaking detailed site planning for the East Yard, it would be advisable to do actual noise testing in public body lands where housing and/or outdoor recreation might be located. The Environmental Control Programs of the Manitoba Department of Environment and Workplace Safety and Health would be in a position to undertake such testing for a government body such as the East Yard Task Force. Exact cost and timing would be established in discussion with the Director, Mr. Larry Strachan.

^{1/}The CMHC guidelines are consistent with "Manitoba Environmental Sound Level Objectives" issued by the Manitoba Department of Environment and Workplace Safety and Health in January 1978. They are also within an unofficial guideline for roadway noise used by City of Winnipeg Streets and Transportation Department in considering new residential areas.

ATTACHMENT F

**STRUCTURAL/ARCHITECTURAL ASSESSMENT OF
FOUR MAJOR BUILDINGS IN EAST YARD**

STRUCTURAL/ARCHITECTURAL ASSESSMENT
OF FOUR MAJOR BUILDINGS IN EAST YARD

TRAINING CENTRE**A. Structural Description and Assessment****General**

This is a two storey building with exterior brick bearing walls. It is divided into 3 bays by 2 longitudinal interior brick bearing walls which support the two outside bays of the second floor structure and all three bays of the roof structure. The interior bay of the second floor structure is supported on independent steel columns, adjacent to the brick bearing walls.

Main Features - Interior

The ground floor is a concrete slab on grade which is at different levels in the different bays. The floor in some areas could be asphalt although this could not be determined for sure without digging an exploratory hole.

The second floor consists generally of wood flooring on wood joists on steel beams which are supported on steel columns and the masonry bearing walls as described above. In some areas the floor joists are much heavier than typical, indicating that they were designed for heavier loads. There has been some water damage to some of the wood joists and a more detailed examination will be necessary to determine whether any corrective measures are required.

Roof

The roof structure consists of wood sheathing on wood joists on structural steel trusses with a sloping top chord and a horizontal bottom chord. The bottom chord is located at the plane of the ceiling. These trusses span to and are supported by the four brick bearing walls. The roof joists cantilever out beyond the exterior walls to form an overhang.

Main Features - Exterior

There are several cracks in the exterior masonry wall indicating that there have been some foundation movements over the years. These however appear to be relatively nominal in nature and are not considered serious. There are some major cracks over a drive-in doorway indicating that the original steel lintel was undersized. A new lintel should be installed prior to repairing the brickwork.

Assessment

In general, this building is in reasonable structural condition although it will need a nominal amount of upgrading in order to extend its life.

B. Architectural Description and Assessment**Architect**

Warren and Wetmore (designers of Union Station and Grand Central Station in New York)

Past Uses

Originally stables until 1929, the garage of the National Cartage and Storage Company until 1937, Canadian National Stationery Stores until 1972, Canadian National Railways Fitness Centre from 1973 to present.

Present Use

Canadian National Railways Fitness Centre.

Main Features - Exterior

The exterior of the building is a two storey pitched roof, masonry clad structure. It is a simple industrial style of architecture with minimal detailing, however, its proportions and massing are well handled for this type of building. The exterior of the building has undergone some alterations (windows bricked-in, etc.), however, the exterior of the building could be restored to its original state (or something approximating its original state) with little difficulty.

Roof

Re-roofed in 1985.

Main Features - Interior

The main architectural feature is the space created by the two central masonry bearing walls that form a continuous central space through the middle of the building from one exterior end wall to the other. This central space is marked on the exterior by large barn-type doors surmounted by a semi-circular archway opening which has since been filled in with masonry. This feature is the most interesting in terms of future re-use and renovation of the structure for other purposes. Another feature of the interior is its structure which is described more fully in the structural assessment by Crosier Kilgour Partners Ltd. The second floor has been renovated as a fitness centre while the main floor remains as a garage and storage function. The floor of the second floor is refinished hardwood maple flooring. At the time of writing, it is unknown whether this maple floor was part of the original construction, however, it is likely that it may have been added during one of the many renovations of the building.

Vertical Circulation

There are 3 new fire stairs in the training centre. The main entrance is a new structure on the north side of the building clad in light steel and enclosing a new steel fire exit stair. Another fire exit

stair is an exterior steel fire escape. The third stair is near the centre of the west end wall of the building and services the office portions of the second floor.

Windows and Doors

Single pane wood windows.

Insulation and Vapour Barrier

There is a space between the exterior wythe of brick and the interior wythe of brick, however, it is unlikely due to the time of construction and type of renovations, that insulation has been installed in the walls. There is no insulation in the roof, according to CN officials.

Heating and Electrical

Heating is from the East Yard steam power plant and the electrical appears to be sufficient for its existing use as a training centre.

Assessment

Architecturally this building has some merit as an historical industrial structure. Due to the central space through the middle of the building inherent in the structure, a very interesting adaptive re-use space could be created on the interior. The scale of the building is well suited to its location in the East Yard next to the riverbank and adjacent to the railway structure of the main line. Its location near Main Street gives good pedestrian and parking access. The spaces could be adaptable to a wide variety of uses but is especially suitable for public gathering functions. Renovations to adapt to any year round use would of necessity be extensive. The entire building would have to be insulated and a vapour barrier added. A new heating system would be required and it is unlikely that the electrical system would have sufficient capacity to handle a major public function and would therefore have to be replaced. New fire stairs would be required and the entire structure would have to be fire rated or otherwise adapted to meet new building code requirements. All new windows and doors would be required. Although it would not produce "cheap space", this building has excellent potential to be renovated and used for other purposes as part of a new East Yard development.

STORAGE BUILDING (Canadian National Express Garage Building)

A. Structural Description and Assessment

General

Access to this building was limited, however, it generally appears to have originally been identical to the Training Centre. The following differences were noted.

Main Features - Interior

The interior columns on the outside bays which held up the second floor in the Training Centre Building have been removed in this building and replaced with a truss system to provide a clear span in these areas. The bottom chords of these new trusses consist of two large diameter steel rods which are bolted through the masonry bearing walls. For reasons unknown the bars are larger on one bay than they are on the other. (Perhaps the design live loads were different.) The steel trusses could only be seen through the windows so that a general inspection of all of the trusses could not be done at this time.

Main Features - Exterior

The exterior overhangs on this building appear to have been shortened as compared to the Training Centre Building.

There have been more significant foundation movements at one corner of the building in particular. This does not appear however to be critical and may well have stabilized.

Assessment

It is not possible to form an overall opinion as to the condition of the building without getting complete access, but those parts of the building which could be seen were in reasonable condition subject to the foregoing comments.

B. Architectural Description and Assessment**Past Uses**

Originally stables, then garage, then miscellaneous railway uses.

Present Use

The building is presently used by the CN Police for various functions which CN was unwilling to discuss, presumably for security reasons.

Main Features - Exterior

This building is identical to the adjacent Training Centre Building previously described with the following exceptions: shorter in length, new attached garage structure, the roof overhang has been cut back all around the building, large exposed steel through-wall anchors at the second floor line.

Roof

Re-roofed in 1985.

Main Features - Interior

The centre bearing walls are similar to those in the Training Centre Building however the rest of the structure has been altered from the original construction removing all columns on the main floor and replacing them with new steel trusses that span from outside masonry wall to interior masonry wall. The anchor bolts for these trusses are visible on the exterior of the building at the second

floor line. The condition of the interior could not be established as we were not able to gain entry to most of the building for security reasons.

Vertical Circulation

Unknown.

Windows and Doors

Similar to Training Centre Building.

Insulation and Vapour Barrier

Probably similar to the Training Centre Building.

Heating and Electrical

The heating is probably similar to the Training Centre Building, the electrical capacity and electrical system are unknown.

Assessment

The same conclusions as for the Training Centre Building hold true for the Storage Building. The building has had several structural and constructural alterations that will probably mean added difficulties and expenses for any renovations. However, due to its architectural merit, historical significance, and adaptable space, this building, like the Training Centre, is a good candidate for possible renovation and re-use.

JOHNSON TERMINAL BUILDING

A. Structural Description and Assessment

General

This is a large four storey storage building of brick and heavy timber construction. It has a basement, with reinforced concrete columns, a concrete floor and concrete basement wall.

Main Features - Interior

The top three floors appeared to be identical in nature and consisted of heavy wood decking on heavy wood purlins supported in turn by heavy wood beams. The connections are of cast iron and/or steel plates and bolts. The columns are heavy timbers. All of the floors have posters indicating a storage load capacity of 250 lbs. per square foot.

The timber was in generally good condition although some horizontal splitting of floor beams was noted indicating possible overloading at some time. At the exterior walls, the ends of the beams had water stains indicating leakage. The part of the wood that could be seen at these locations appeared to be in good condition.

Inspection of the basement was limited due to poor lighting, however, it appeared to be built in massive proportions as would be required by the posted live load of 600 lbs. per square foot. The structural framing consisted of large timber purlins on steel beams which were supported on large concrete columns. The floor was wet although it was not flooded.

Roof

The roof has high brick parapet walls with a concrete coping. The roof structure is built with slopes to drains and it is noted that one drain at least appeared to be blocked. There were no overflow scuppers in the parapets.

Assessment

In general the building was massively constructed and is in good structural condition with no indications of any foundation movements. Any incorporation of this building into a future development would likely require considerably less live load than the building was designed for, which would more than compensate for the checking of beams, etc., described above. Prior to renovating, the ends of the beams should be examined where they are built into the walls to determine whether there has been any rotting and whether remedial work is necessary.

B. Architectural Description and Assessment

Past Uses

Warehouse

Present Use

Vacant

Main Features - Exterior

At approximately 240' in length and 90' in width and 4 storeys high, this building is the largest in the East Yard. It is a typical warehouse structure similar to that found in the Exchange District. It has a masonry exterior cladding. An unusual feature is that one corner of the building is notched to accommodate the turning radius of train cars which stop against the east wall of the building. The style of the building is simple and utilitarian with no outstanding architectural features.

Roof

The tar and gravel roof appears to be in generally fair condition. Some roof drains have been damaged and there is evidence of some ponding in certain areas of the roof. The roof drains run down through the interior of the building and there do not appear to be any emergency scuppers draining water to the outside. Some of the interior masonry walls extend up through the roof to a height of approximately 3 to 4" indicating that these could be considered as fire walls. There is stair tower access onto the roof.

Main Features - Interior

The interior of all floors is basically large open warehouse space divided only by 3 masonry bearing walls which run across the width of the building dividing it into 4 sections. The wood columns are on approximately 15' centres (dimensions to be checked) which is common for warehouse space of this type. The floors are primarily softwood planks which have been damaged by years of heavy use, overlaid in sections by hardwood flooring. The interior finish of the exterior walls as well as the interior walls is masonry. The ceilings are open wood joists and planks in relatively good condition in most areas. On each floor there are a number of offices located on the west wall of the building adjacent to the fire stairs. These are in relatively poor condition. The exposed heavy timber columns, beams, joists and plank flooring are interesting features of the building and are described more fully in the structural assessment section of the report.

Vertical Circulation

Two enclosed steel fire stairs leading directly to the exterior. Four freight elevators, one in each section of the building.

Windows and Doors

The windows throughout the building are steel framed, single paned, wired glass, industrial windows.

Insulation and Vapour Barrier

The building has no insulation or vapour barrier apparent.

Heating and Electrical

Since the building has been vacant for some time it is difficult to determine the condition of the heating and electrical system, although it is reasonable to assume that the heating is provided by the East Yard power house and that the electrical was sufficient for its warehouse function, but would not be sufficient for any other function.

Assessment

The scale and character of this building is much more suitable to the Exchange District than it is to the riverside. If it is re-used, considerable attention should be paid to renovating the exterior of the building to visually reduce the scale and open the main floor so that the building can relate better to its site and to public access. As a conclusion regarding site compatibility the character of the Johnson Terminal in this location is much less suitable for redevelopment as a public building on a riverside location than the previous two garage buildings. However, given the amount of space that is available and the generally good condition of the building, it would be wise to consider attempting to re-use it and re-design the exterior to minimize its negative characteristics.

The structure, foundations and shell of the building appear to be in good condition and capable of re-use. The rest of the building would have to be new construction. This would include all exterior windows and doors, all elevators and possibly stairs and the entire mechanical and electrical system. The building would have to be insulated. Vapour barrier continuity would be a problem between floors and between masonry fire walls. However, this is a problem common to all renovations of this type. Depending on its new use the floors may have to be fire rated which would mean covering the existing exposed wood joists. In terms of renovations and re-use, this building is very similar to the Ashdowne's Warehouse which is currently being considered for re-use as residential accommodation. This is a possible re-use function for the upper floors of this building and the Ashdowne Warehouse example could be used as a model in terms of costs and renovation techniques. The upper floors are also suitable for office accommodation (if enough offices can be found). Due to the column spacing the building is not suitable for large open areas which restricts the type of functions that can be accommodated, especially on the main floor of the building, where public functions are appropriate. A market or shops for instance are functions that would be compatible with the existing structure while open area functions such as theatres or halls would not be appropriate without major and expensive structural alterations.

There is evidence of considerable water penetration into the building, and this condition must be rectified as a priority in any renovation. The possible causes of the penetrations are either:

1. damaged roof drains and/or
2. water entering the basement through ground level windows or through the basement walls or floor. The water has already caused damage in certain areas such as buckling of the wood floors on the main floor and plaster deterioration.

B & B BUILDING

A. Structural Description and Assessment

General

This building is a one storey structure which is T-shaped in plan. It has brick exterior walls, a concrete floor slab on grade and a heavy timber truss roof.

Main Features - Exterior

The exterior brick masonry is in poor condition with many cracks indicating that the building has had foundation problems. Some of the masonry pilasters on the main bearing wall appear to be out of plumb.

The smaller wing of the structure appears to be in better condition, perhaps because of a different use which resulted in a less harsh environment than existed in the larger wing.

Roof

The roof trusses are of timber construction with the diagonal timber compression members and vertical steel rod tension members. Many of the timbers in the main wing appear from ground level to be in poor condition due to moisture from the leaking roof. Most of the trusses appear to have significant deflections. This area used to service steam locomotives and the effects of smoke and steam may have been the reasons for the deterioration which is evident.

Assessment

In conclusion, this building is in generally very poor structural condition with evidence of foundation problems and a more detailed and extensive investigation would be necessary if it were considered desirable to recycle it. From this preliminary investigation, it would not appear to be economically feasible to restore this building so that its life could be extended.

B. Architectural Description and Assessment**Past Uses**

Engine and train car maintenance

Present Use

Storage and workshop

Main Features - Exterior

This building is a 1 storey T-shaped building with masonry exterior finish materials. It is a low building the peaked roof of which has been altered to become a flat roof building with mansard type roof edges. Its original function as an engine and train car service building is still apparent by the large wooden doors across both ends of the building. The exterior of the building is not in good condition at the present time, with major cracks apparent in some locations. Grade has been built up around the building so that original door thresholds are in some cases 1 to 2' below grade with step alterations to accommodate this situation. While the proportions and design of the building are not outstanding, the interest of this building lies in its character as an early railroad services structure.

"Long paired windows along both sides of the brick structure have segmented voussoir heads and sills of either concrete or stone. A small amount of brick work in the form of corbelling and wall detailing into bays constitutes the extent of deliberate ornamentation."
Sheila Grover - Historic Buildings Committee

Roof

The flat roof has deteriorated to a point where in some sections there is no roofing material left, thereby exposing the wooden roof structure. The evident water penetration through the roof has contributed to the significant deterioration of the wood structure inside

the building. The original peaked roof was completely replaced in 1936 with the present flattened gambrel roof. To accommodate the new roof profile the walls on the two ends of the building have been built up on the sides with new masonry. There are a number of wood ventilator enclosures on the roof. These have deteriorated beyond repair, in most cases.

Main Features - Interior

The interior of the main section of the building is one large open space which was the engine and train car repair area. The main architectural features are the wooden columns and trusses which create an extremely interesting interior space. These trusses are in extremely poor condition due to water damage from rain through the roof and/or steam damage from years of railroad engine use. The T-section of the building, which was originally a blacksmith shop and now a machine room/work room, has a similar structure that is in good condition. This work room is separated from the main area by a masonry wall.

Vertical Circulation

N/A

Windows and Doors

The long windows along both sides of the brick structure are single pane and presently in poor condition. The doors are of wood construction and are in a similar condition.

Insulation and Vapour Barrier

Non-existent

Heating and Electrical

It was not possible to fully assess the condition of the heating and electrical system during this walk through, however, it is safe to assume that both systems would have to be replaced if the building was to be renovated.

Assessment

This is a most difficult building to assess conclusively in terms of re-use potential since it is historically the most significant of the buildings described, but it is also in the worst condition. If the building is to be re-used, its most likely and appropriate use would be as a railroad museum continuing its past use and retaining the spacial configuration of the building. It is safe to assume that much of the building would have to be re-built and the renovation would be extremely costly, however, it might be warranted if its historical value is deemed to be significant.

If the building was not to be used as a railroad museum, then the re-use of this structure would be questionable. In this case the significant costs for renovation would not be balanced by a use which reinforces its primary positive feature which is its historic signifi-

cance as railroad services structure. A summary conclusion might be that if the building was re-used as railroad museum the significant cost associated with its renovations may be worthwhile, but if it is not to be used as a rail museum, then the cost associated with its renovations would probably not be worthwhile.

ATTACHMENT G

HISTORICAL BACKGROUND

ATTACHMENT G
HISTORICAL BACKGROUND

SOURCES

In addition to standard historical reference books, available historical pamphlets, and various issues of Manitoba Archaeological Quarterly "Archaeology Today", the history of The Forks area has been explicitly addressed in the following recent publications:

Priess, P., P.W. Nieuhoff, S.B. Ebell
1986 Archeological Investigation of the Junction of the Red and Assiniboine Rivers, 1984. Parks Canada Research Bulletin Number 241 (January 1986)

McLeod, K. David
1986 A Predictive Study of the Red and Assiniboine Rivers Junction: A Pre-Impact Assessment of the Site of the Forks National Historic Park and the Proposed Provencher Bridge Realignment. Historic Resources Branch publication, Manitoba Culture, Heritage and Recreation (5 September 1986)

Lombard North Group
1985 The Forks, Interim Status Report. Report to Parks Canada (13 August 1985)

Lombard North Group
1986 The Forks: Site Development Plan. Report to Parks Canada (2 June 1986)

HISTORICAL HIGHLIGHTS

Available archaeological and historic evidence supports the following brief outline of past activities:

a. **Prehistoric**

- human populations may have moved into southern Manitoba about 11,000 years ago; these were most probably nomadic hunters and gatherers whose main economic focus was on large mammals, such as bison

- during the Altithermal period (ca 5,000 B.C. to 3,000 B.C.) most people in this area probably lived in or near river valleys or at the edges of parklands or forests where game animals and plant resources were still available despite increased temperatures
- archaeological deposits dating from about 3,000 B.C. to A.D. 1 indicate that, on a seasonal basis, people in this area were hunting bison using traps as well as continuing to fish and gather plants
- around A.D.1, ceramics were introduced by people from the east and bison hunting had again become the prime economic endeavour on the plains to the southwest (this continued into the historic period)
- it is expected that The Forks would contain prehistoric archaeological resources of considerable time depth or complexity, i.e., covering the past 2,000 to 3,000 years
- the major prehistoric use of The Forks area was probably native encampment, followed by burial and (to a much lesser extent) war party activity

b. Historic - Fur Trade and Early European Settlement Before 1870

- LaVerendrye's expeditions marked the beginning of a European presence at The Forks, with Fort Rouge being constructed in this area (probably the south bank) in the 1730s
- various early trading or wintering posts have been placed in close proximity to The Forks: St. Pierre (1752-53), Boyer and Bruce (1781-82), John McDonnell (1793-94), Alexander Henry (1800-08) or Peter Fidler (1819-22)
- around 1800, Northwest Company canoe brigades from various parts of western Canada began to meet near The Forks on their way to and from Fort William; occasionally Hudson's Bay Company (HBC) canoe brigades would also stop there, meeting a Northwest Company brigade
- the fur trade period gave birth to a distinct half-breed "people of the plains" who called themselves "metis"
- the only food regularly available in quantity for the vast prairie fur trade empire was dried buffalo meat derived from animals that grazed to the west and south of The Forks; the metis, who became the buffalo hunters for the fur trade, established their effective headquarters in this area; many metis lived in small farms along the banks of the Red or the Assiniboine
- the Northwest Company began construction of Fort Gibraltar I in 1810 on the north bank of The Forks; its loss and destruction (after HBC capture) in 1816 was followed in 1817 by construction of Fort Gibraltar II, again on the north bank of The Forks
- after amalgamation of the Hudson's Bay and Northwest Companies in 1821, Fort Gibraltar II was renamed Fort Garry and became

- the Hudson's Bay Red River headquarters with a larger local establishment
- the junction of the two rivers was known as "The Forks" during this early period of settlement
 - Lord Selkirk had purchased in 1808-09 a tract of land from HBC ("Assiniboia") of 300,000 square kilometers centred approximately on The Forks; in the fall of 1812 the first group of Selkirk settlers arrived at The Forks via York Factory; several years of hardship and conflict followed until the fur trade companies amalgamated in 1821; in 1834 Selkirk's heirs turned their land over to HBC which administered Assiniboia along with the rest of its vast holdings approximating 25 per cent of North America
 - in 1826, when the Red River reached its highest recorded spring flood, the original Fort Garry was extensively damaged; in the early 1830s an attempt was made to replace it with Lower Fort Garry, downstream and outside of the Red River settlement -- however, this attempt was unsuccessful so that around 1835 the construction of a new fort, Upper Fort Garry, was begun slightly west of the original Fort Garry on the north bank of the Assiniboine near The Forks; the original Fort Garry continued to exist until it was dismantled in 1852, and the new Upper Fort Garry served as the focus of economic, social, administrative and military activity until its demolition in 1882
 - in 1836, HBC began an experimental farm east of Upper Fort Garry on the west bank of the Red River which operated, unsuccessfully, until 1841; stables from this farm may have been located in the vicinity of the present East Yard and were still standing as of 1848
 - most activity prior to the 1880s in the Red River community was concentrated either at Upper Fort Garry or in the slowly forming town site located north of both this fort and the large portion of land surrounding it, 202.5 ha, which was reserved for the HBC (this reserve included the area bounded roughly by the rivers on the south and east, Water and Notre Dame Streets on the north, and Colony Creek on the west)
 - by the early 1850s, after dismantling of the original fort, the immediate area of The Forks was dominated by Upper Fort Garry located across the present-day Main Street along the north shore of the Assiniboine River; to the east of this fort, a flat plain served as a company area and gathering point for wagons and a few warehouse and mill buildings were located along the Assiniboine River; a ferry operated across the Assiniboine River (Main Street) and across the Red River (linking Broadway and Provencher); no specific use has been identified for the South Point area
 - across the Red River, the Roman Catholic church structure at the site of the present Basilica showed considerable evolution during the period after 1818:

- 1818, first building (small mission chapel)
- 1819, replaced by large wooden church
- 1832, replaced by first stone church in western Canada (twin-spired, important-looking building photographed around 1850, and immortalized in poem by John Greenleaf Whittier)
- 1860, stone church destroyed by fire
- 1863, a single spired church erected by Bishop Taché
- steamboat traffic first linked The Forks with St. Paul in 1859, although this traffic did not become considerable until some ten years later; flat-bottom boats and barges also travelled on the Assiniboine; passengers and wares were discharged and transferred at The Forks
- during the period prior to the Canadian railroad, travel between The Forks and the Upper/Lower Canada area to the east typically was via the United States
- relevant HBC lands were transferred to Canada in 1870 when the province of Manitoba was created; as noted, however, a large portion of The Forks and surrounding area was reserved for HBC

c. Historic - Canadian Development After 1870

- the north bank area of The Forks provided a temporary home for immigrants arriving during the 1870s (several immigrant sheds were erected along with other more temporary shelters); a hospital was also moved to this area; W.J. McAuley's lumbermill, men's boarding house and office were located on the north side of Notre Dame Street East, while north of this complex was a single structure associated with Dick and Banning's sawmill
- by 1880, a series of mills were located between Notre Dame East and Lombard Avenue; a number of residences were constructed along Broadway Avenue, and early photographs (1880-81) show shacks along the Red River banks north of The Forks
- the CPR transcontinental rail line linked Winnipeg with eastern Canada by 1881; this rail line, however, was well north of The Forks area and resulted in the city's commercial district becoming centred for a considerable period on Main Street between Portage Avenue and the CPR Station; rail yards were also established to the west of the Station
- Upper Fort Garry was demolished in 1882; as a result of the new CPR railroad, the rivers rapidly lost their function as a means of transportation, and the commercial role of The Forks accordingly changed
- by 1884, a bridge crossed the Assiniboine River, linking Broadway and Provencher Avenues; several structures were located along the north shore of the Assiniboine River at The Forks, and activity also existed north of The Forks along the west shore of the Red River -- however, no development is indicated for the South Point; intensive building was concentrated along

Main Street north of Broadway Avenue, and north of Water Street (i.e., large areas in the centre of the present East Yard remained undeveloped)

- in 1884, a corporate ancestor of the Canadian Northern Railway purchased a large portion of The Forks site from HBC for the purpose of locating its downtown rail passenger terminal, freight depot, repair shops and marshalling yard; in part, it was hoped that a profitable interface might exist with waterborne traffic - however, this failed to materialize
- railway development and operation at The Forks began during the late 1880s with the Northern Pacific and Manitoba Railroad's unsuccessful attempt to implement a north/south linkage into the US rail network
 - the truss draw-bridge across the Assiniboine River was built in 1888 (this is the bridge that CN will abandon as part of the present day redevelopment)
 - the B and B Building was built in 1889 as a maintenance shop and roundhouse for this railway, forming part of the original terminal complex (it is considered today to be the oldest standing railway roundhouse and repair facility in western Canada)
 - a station was developed near the junction of Water and Main streets
- in 1894, the grandstand and horse race track at Fort Garry Park was opened along the north bank area of The Forks south of Broadway Avenue between Christie and Main streets; rail activities dominated the balance of The Forks (including the South Point and the east bank of the Red River)
- in 1901, Canadian Northern acquired the floundering Northern Pacific and Manitoba line and incorporated The Forks rail yard facilities into its cross-country mainline, in the subsequent decade, Canadian Northern arranged to lease and share some of these facilities with another expansion-minded Canadian railroad (Grand Trunk Pacific)
- in 1904-05, construction began on the big St. Boniface church to replace Bishop Taché's single spired structure on the east bank of the Red River across from The Forks (this church was elevated to a basilica in 1940, and subsequently destroyed by fire in 1968; the present church was built within the walls of the previous structure in 1972)
- the Fort Garry Park grandstand burned in the fall, 1906
- in 1908, the Union Station and related train shed began to be constructed (designed by Warren and Wetmore, the architects for Grand Central Station in New York City, this building is one of only three or four monumental railway stations left in Canada and is recognized as a national architectural site)
 - the facility was opened in 1911
 - one result of this construction was termination of the Broadway Avenue extension to Provencher
 - the earlier Broadway-Provencher bridge over the Red River was subsequently dismantled around 1920

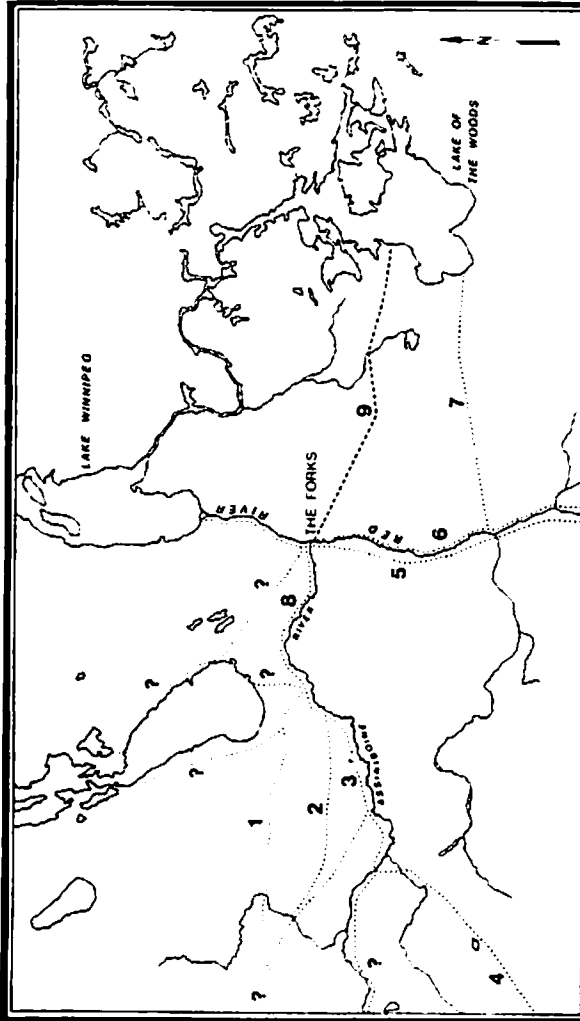
- between 1909 and 1912, significant expansion of rail-related facilities occurred in the East Yard due to competition and duplication between Canadian Northern and Grand Trunk Pacific
 - the three freight sheds were built by these companies in the northern segment of the property
 - the Great Northern stable was designed by Warren and Wetmore, and housed 120 horses until it was converted to a garage (present use as CNR fitness centre)
 - the Grand Trunk Pacific stable was nearly identical to the Great Northern stable (it was eventually converted to a garage, and is presently used by the CN Police for various functions)
 - the main shops and yards were moved across the Assiniboine to Fort Rouge in response to the quick growth of activities
- the Fort Garry Hotel officially opened on December 23, 1913
- The City of Winnipeg showed rapid growth from the 1880s until 1913, expanding from 25,000 to 260,000 people; most of this growth occurred from 1891 to 1913; by the close of World War I, Winnipeg was Canada's third largest city
- the virtual cessation of the western immigration flood after World War I plunged the Canadian Northern and Grand Trunk Pacific into insolvency in 1918; amalgamation was arranged with an eastern railway (the National Transcontinental) and the CNR was created in 1923 by the federal government
- the Johnson Terminal building was constructed between 1928 and 1930 as a warehouse (it is presently vacant)
- after Broadway Avenue was closed in the East Yard, several buildings were developed by Building Products and Coal company Limited south of the new Provencher Bridge; north of this area stood a number of structures which included several residences on Notre Dame and (nearer the Red River) the Lambert Fuel Yards and the Fort Garry Coal Yards
- two other still standing buildings of historical interest are noted in the area of Water and Pioneer Streets:
 - 115 Pioneer -- an old house that may have been built in the 1870s (if so, it would be one of the oldest structures still standing downtown)
 - 81-85 Water Avenue -- an old brick building that may have been built between 1890 and 1910
- during the period after World War II, trucking and intercity buses cut deeply into the railroads' former shipping dominance throughout North America; in recognition of this trend, by the 1960s CNR begin relocating its freight-handling operations away from the East Yard to the suburban Symington Yards
- by the early 1970s, CNR acknowledged that its East Yard site had become obsolete and surplus to its freight-handling requirements; accordingly, in 1973-74, CN joined with The Great West Life Assurance Company in preparing a major redevelopment proposal for this area (see Part 2 and Attachment A for review of this proposal, and numerous subsequent proposals)

d. Supporting Figures

The following figures are provided:

- Figure G-1: maps of pre-settlement trails and early forts
- Figure G-2: 1848 map of The Forks
- Figure G-3: enlargement of 1848 map
- Figure G-4: extent of HBC Reserve after 1869
- Figure G-5: maps of The Forks and Winnipeg in 1869 and 1872
- Figure G-6: 1880 Bird's Eye View of Winnipeg
- Figure G-7: 1895 map of Winnipeg
- Figure G-8: 1896 Bird's Eye View of Winnipeg
- Figure G-9: recent Parks Canada excavations at The Forks

FIGURE G-1

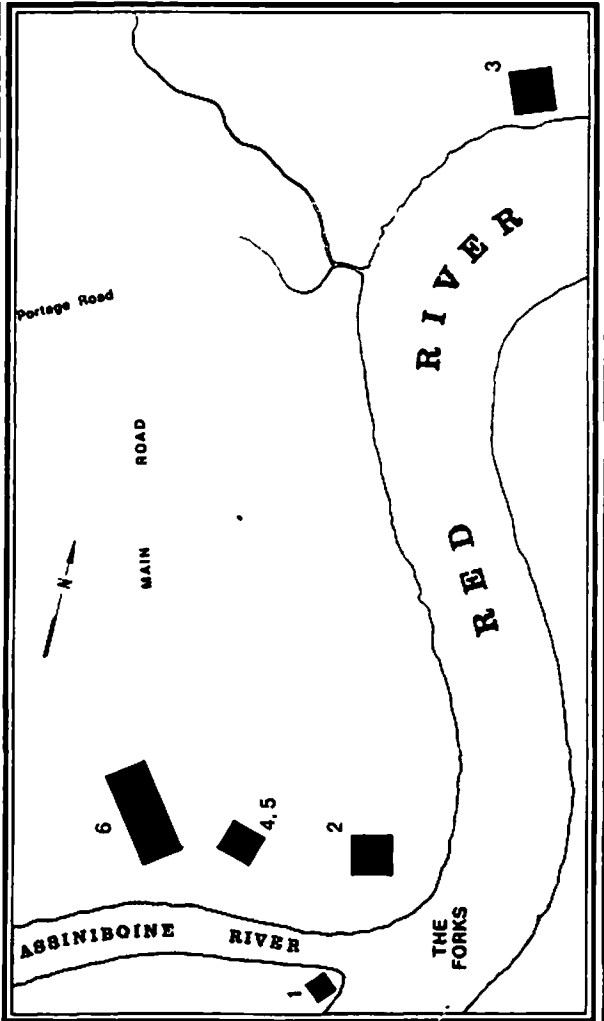


PRE-SETTLEMENT TRAILS

Converging at the forks

1. North Fort Ellice Trail
2. Middle Fort Ellice Trail
3. South Fort Ellice Trail
4. Mandan Trail
5. Pembina Trail
6. Crow Wing Trail
7. Sioux Trail
8. Portage Trail
9. Dawson Road
- ? Other trails

after Martin Kavanagh et al



EARLY FORTS AT THE FORKS

Beginning with Fort Rouge erected by La Vérendrye for a supply base in 1738, the period of forts ended in 1882 with the demolition of Upper Fort Garry.

1. Fort Rouge, 1738 (La Vérendrye)
2. Fort Gibraltar No. 1, 1810 (North West Co.)
3. Fort Douglas, 1812 (Hudson's Bay Co.)
4. Fort Gibraltar No. 2, 1817 (North West Co.)
5. Fort Garry (Old), 1822 (Hudson's Bay Co.)
6. Upper Fort Garry, 1835 (Hudson's Bay Co.)

after William Douglas et al

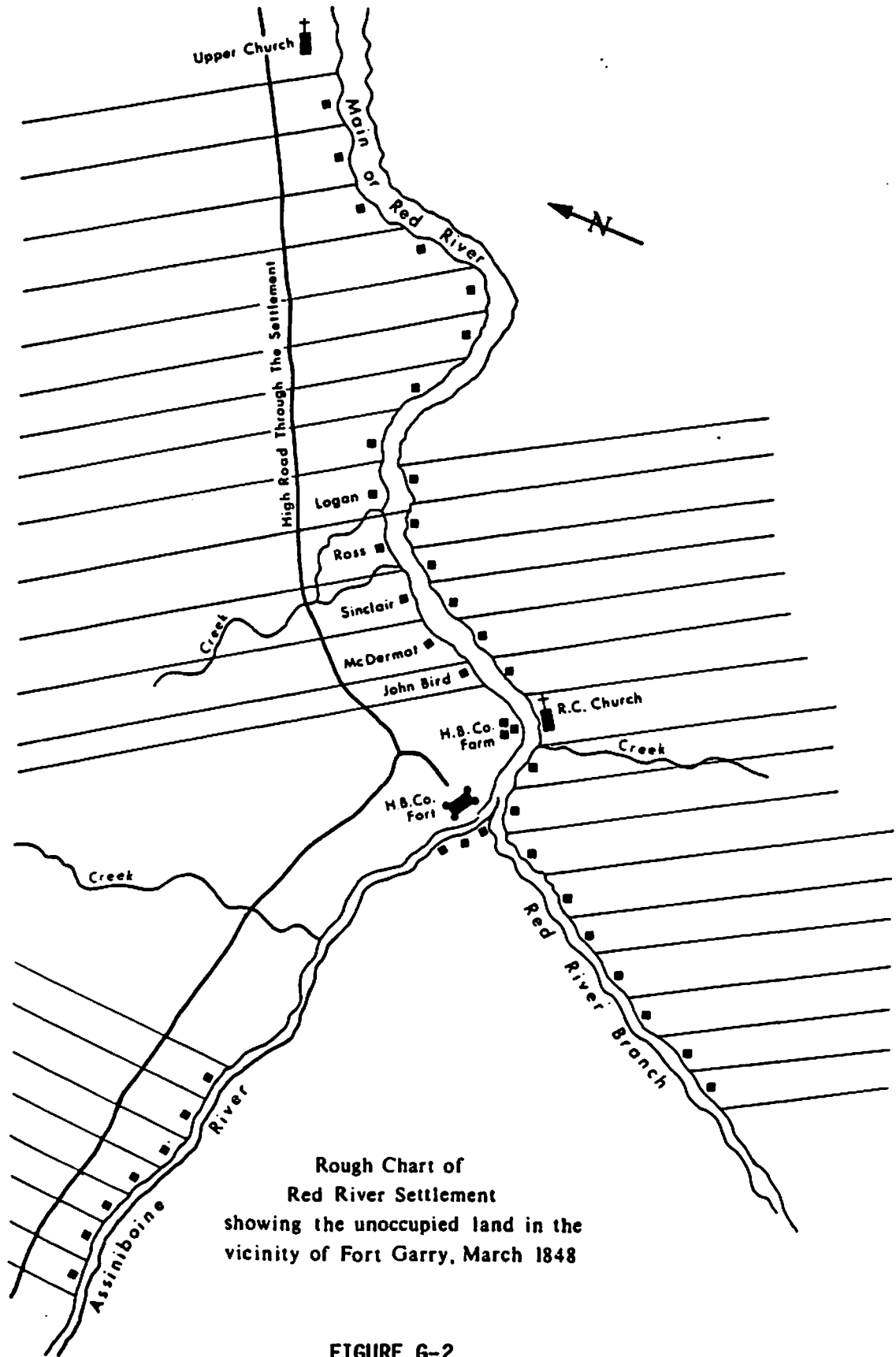
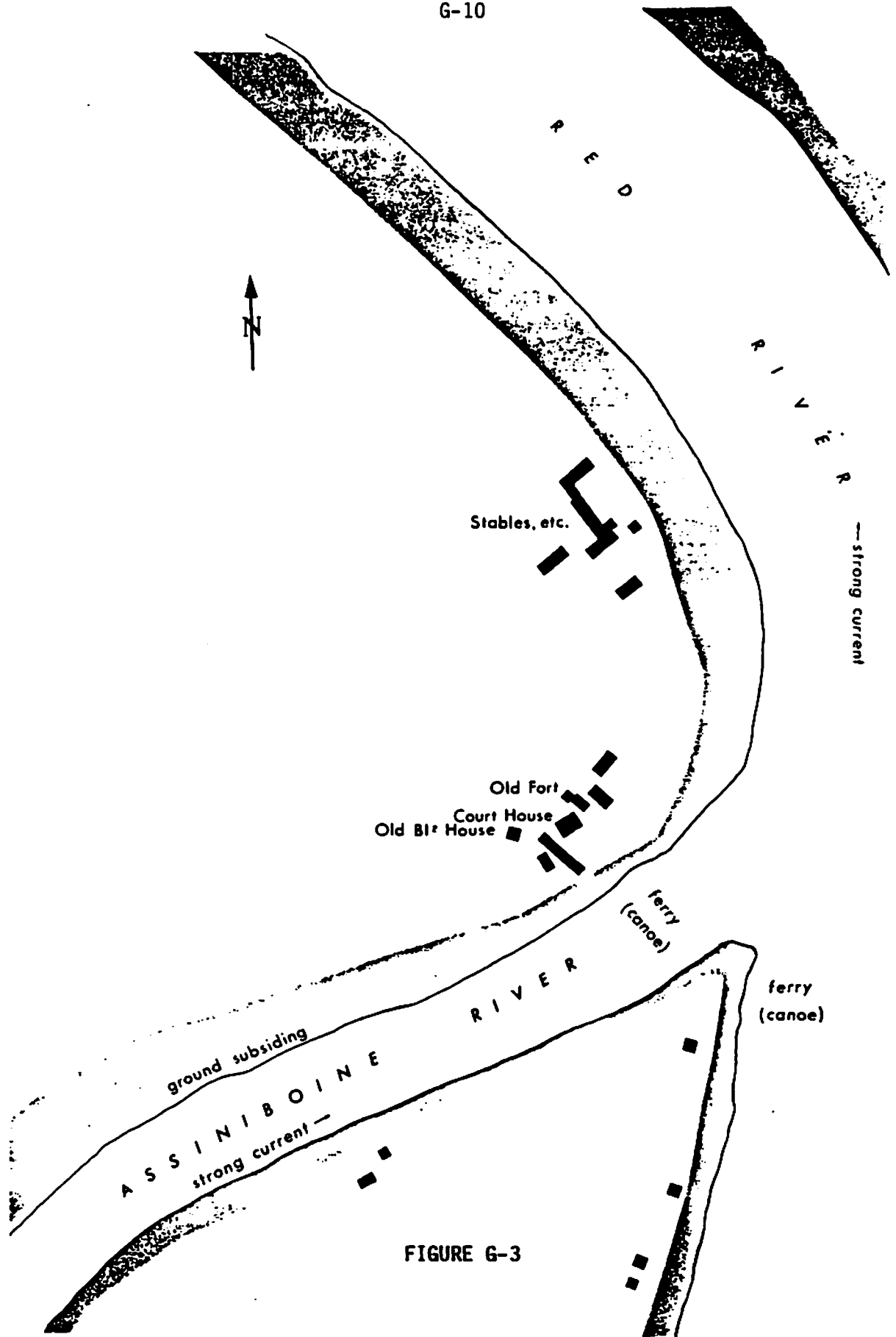


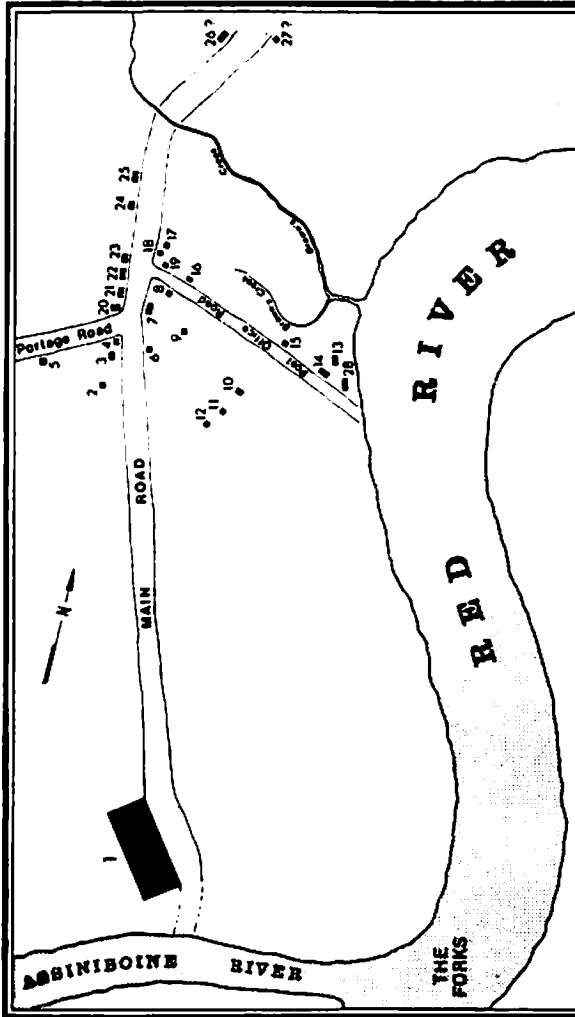
FIGURE G-2

1848 Map of the Forks Area Showing the HBC Experimental Farm (Courtesy H.B.C.A.)



Enlargement of an 1848 Map Showing Location of HBC Experimental Farm Stables (Courtesy P.A.M.).

FIGURE G-5

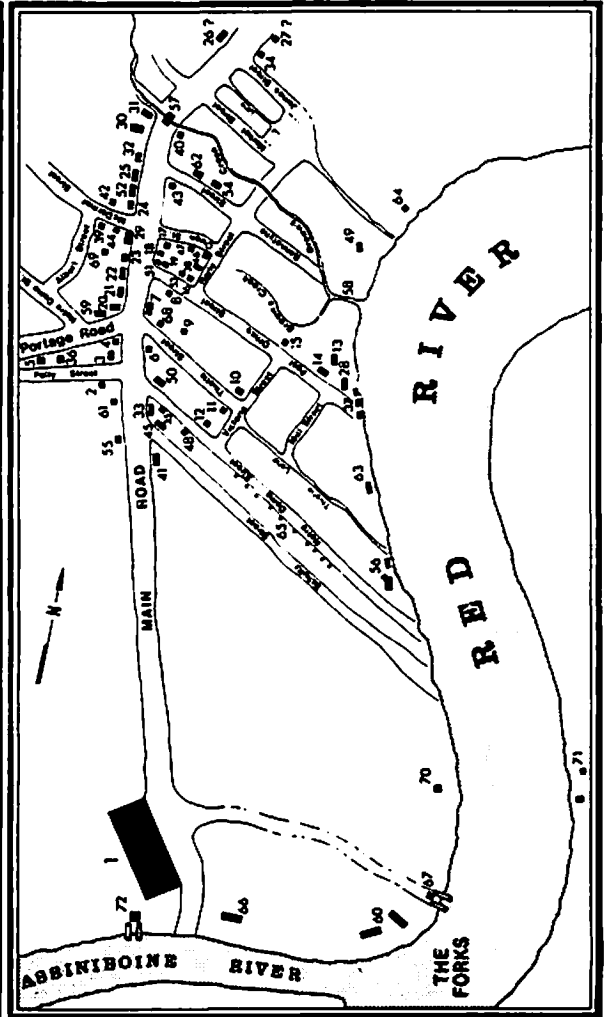


WINNIPEG IN 1869

A few hundred yards from Fort Gary at the junction of Portage Road and Garry (Main) Street, a cluster of early traders and illicit dealers in furs carried on trade with the Indians. At this point Winnipeg's commercial core began to take shape. It has remained to this day the heart of the commercial-financial district. Early in this century those areas north and south of Main Street became the wholesale center for Western Canada.

Numbers are identified on map below.

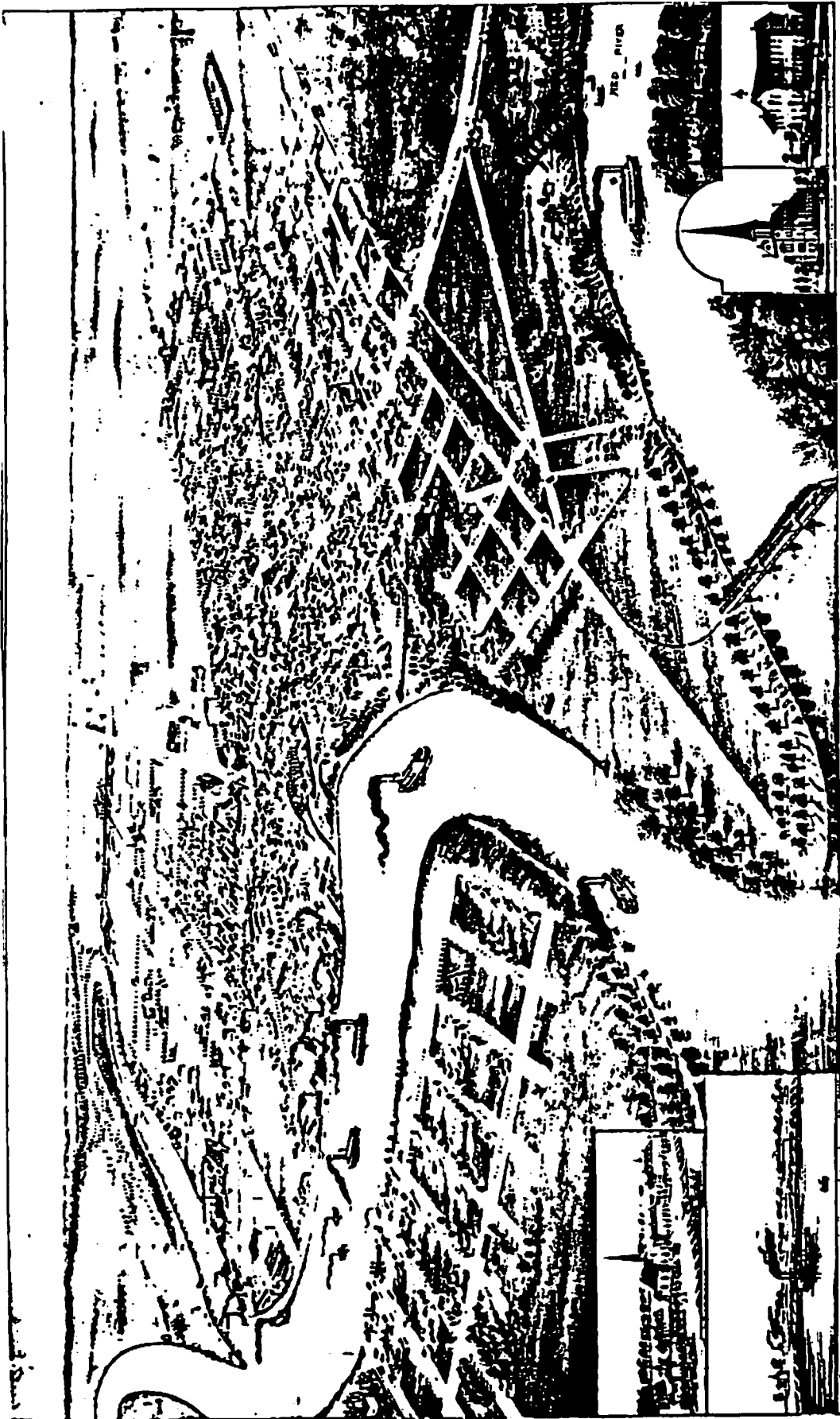
Source: Begg and Nursey, *Ten years in Winnipeg*



WINNIPEG IN 1872

- 1 Fort Gary
- 2 Whelan Driver's bunking
- 3 Holy Sacrament Church
- 4 Brad Brown & Pettibone and
- 5 O. Marchbanks Hotel
- 6 Indian Department
- 7 Carleton House
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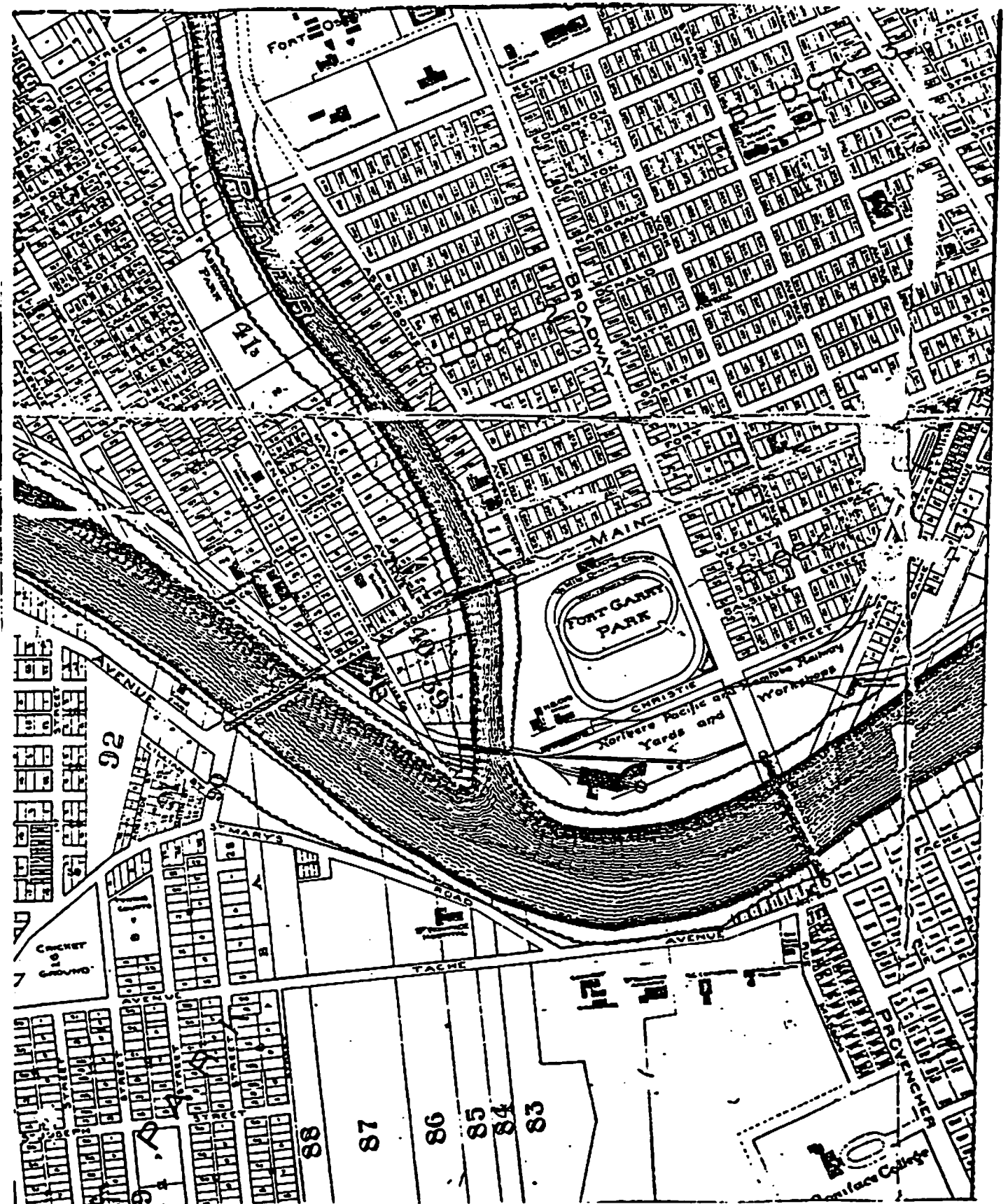
Fiftieth Anniversary Issue,
Manitoba Free Press,
November 9, 1922



MANITOBA
 INCORPORATED IN 1870
 1880
 POPULATION 100,000

Bird's Eye View of Winnipeg, ca. 1880 (Courtesy P.A.M.).

FIGURE G-6



Portion of McPhillip's Map of Winnipeg, 1895 (Courtesy P.A.C.)

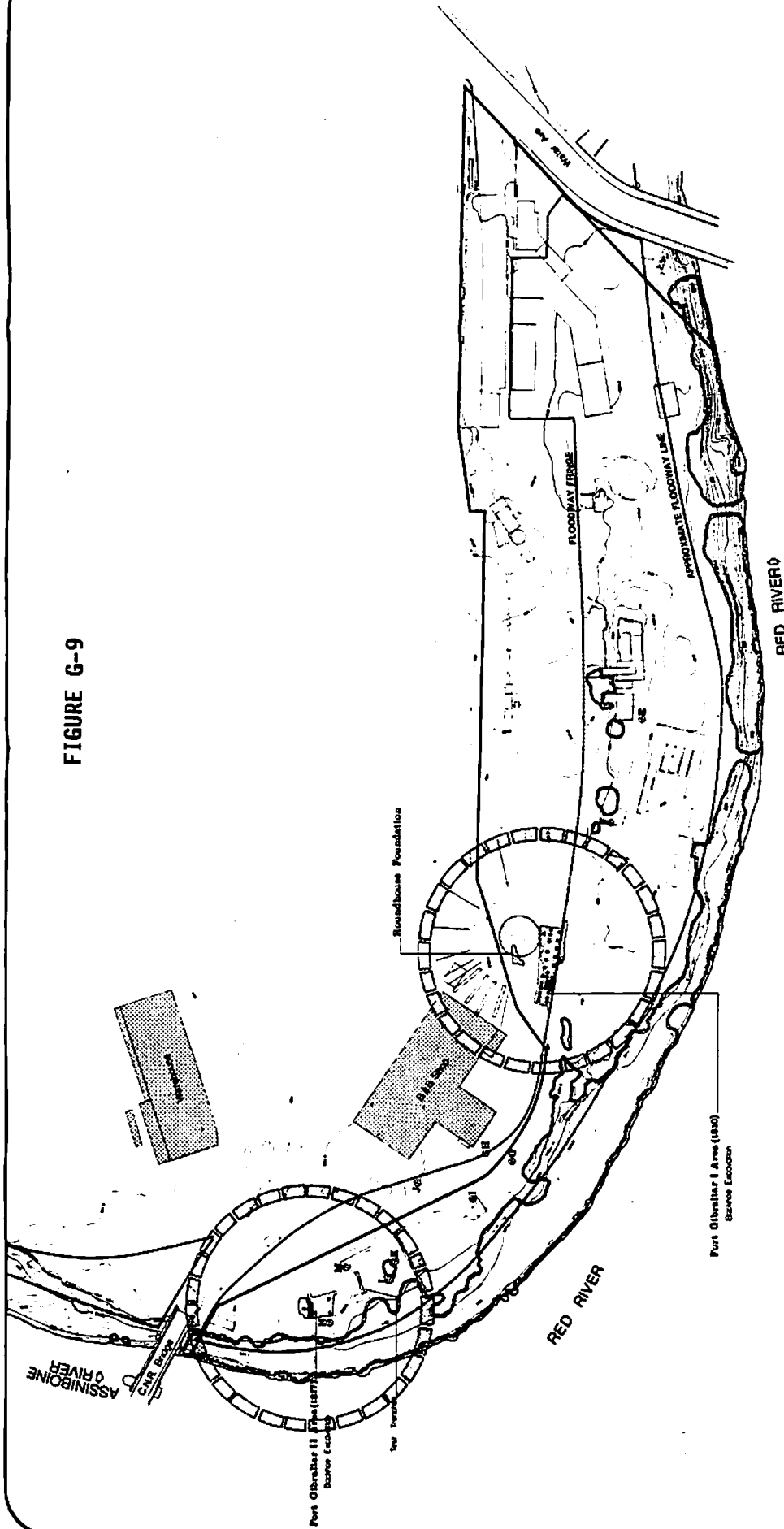
FIGURE G-7



FIGURE G-8

Bird's Eye View of Winnipeg, ca. 1896 (Courtesy P.A.M.).

FIGURE G-9



THE FORKS

PARKS CANADA · CANADA MANITOBA A.R.C. AGREEMENT
HISTORY & ARCHAEOLOGY

LEGEND

- Park Site Boundary
- Park Land Boundary
- Park Land Boundary
- Park Land Boundary

Scale: 1:500 METRIC

0 10 50 75

North

LOMBARD NORTH GROUP
LANDSCAPE ARCHITECTS PLANNERS ENGINEERS
WINNIPEG MANITOBA CANADA

ATTACHMENT H

TOURISM/RECREATION ATTRACTIONS STUDIES

1. REVIEW OF WINNIPEG TOURISM MARKET SURVEY

One of the Task Force's objectives is to identify components to attract people to The Forks riverfront area on a year-round basis and to enhance tourist and recreational activity for Winnipeg and Manitoba; in addition, the Task Force seeks to identify developments which will complement existing activities and initiatives in the remainder of downtown Winnipeg.

The 1985 market survey of potential Winnipeg tourist attractions, prepared as part of the recent Winnipeg Tourism Development Study undertaken by Travel Manitoba and the IBI Group, provided the following perspectives on potential visitation to such activities:

- a. Projections ranged from 527,000 to 591,000 visits (first year of operation) for three of the event themes examined (Riverfront Complex, Historic Area, Theme Park), and considerably lower for the Summer Festival (377,000) and Winter Festival (204,000). It should be noted, however, that the Winter Festival event is one theme which might be combined with other themes in order to yield improved year-round visitation; in addition, at least some aspects of the other themes could also be combined.
- b. For each event theme, the Winnipeg market accounted for at least 65% of all projected visits:
 - the Riverfront Complex ranked second in projected Winnipeg visits, behind only the Theme Park
 - a high proportion (35%) of Riverfront Complex projected visits from Winnipeg were from under 18 year olds (versus 26% of Heritage Area and 30% for Theme Park)
 - the Theme Park projected 2.7 average visits per year (versus 2.2 for the Riverfront Complex and the Heritage Area).
- c. For each event theme, the "Other Manitoba" market typically exceeded total projected visits from outside Manitoba (the Riverfront Complex was the one exception):
 - the Riverfront Complex in the Other Manitoba market ranked lowest of all concepts other than Winter Festival
 - Theme Park projected visits from this market ranked far higher than for other event themes; a key factor was projected visits from under 18 year olds

- the low projected visitation from this market for the Riverfront Complex may reflect the fact that four of the key components assumed for this event ranked relatively low in appeal to prospective visitors, i.e., the survey results were clearly affected by the assumed mix of components specified for each theme event.
- d. The Riverfront Complex shared top rank with Heritage Area in the remaining travel market which included U.S. visitors from Minnesota and North Dakota.
- e. Examination of projected visitors to the Riverfront Complex indicated the following relative interest in each component examined in the study (thousands of visits in first year):

	<u>Total</u>	<u>Winnipeg</u>	<u>Other Manitoba</u>	<u>Other</u>
- Science Centre	367	274	29	64
- Water Amusement Park	288	207	25	56
- Ethnic Pageants	274	196	26	52
- Summer Games	259	188	24	47
- Farmers' Market	257	203	25	29
- Arts/Music Park	239	169	21	49
- Film Festival	237	188	18	31
- Imax/Omnimax Theatre	232	154	18	60
- Historic Interpretive Centre	231	162	26	43
- Children's Village	228	150	29	49

It is apparent that potential visitors to a Riverfront Complex would welcome a mixture of entertainment/recreation/sport activities in combination with cultural/artistic and historic activities as well as new market activities.

- f. Respondents in this survey from different regions ranked different attractions as follows:

	<u>Share of Respondents (%)</u>			
	<u>Winnipeg</u>	<u>Other Manitoba</u>	<u>Minneapolis</u>	<u>N.D. Other Minnesota</u>
- Science Centre	56	36	50	57
- Water Amusement Park	46	34	39	54
- Farmers' Market	44	33	<36	<38
- Summer Games	42	32	42	44
- Arts/Music Park	41	31	50	51
- Ethnic Pageant	40	32	44	47
- Outdoor Music Stage	48	<31	50	50
- Harvest Festival	34	39	44	<38
- Historic Interpretive Centre	33	32	36	38

Focusing on the key Winnipeg market, it is apparent that significant interest exists in new "water amusement" activities as well as the

Farmers' Market, Summer Games, and various other cultural and historic activities; the Historic Interpretive Centre as such is given significant interest -- but this is seen to be below that given many other activities. The Science Centre attraction is shown to rank first for Winnipeg and even the U.S. markets -- even though this item is probably not feasible (as explained in the next section below).

The above information confirms significant interest from Winnipeg, Other Manitoba and Non-Manitoba residents in a new riverfront complex that integrates various new functions, e.g., recreation/sports, public market, culture/heritage, and historic interpretation. It is apparent that proper theme development and marketing of a total package could play an important role in the ultimate success of such a development. It is also apparent that the Winnipeg and Other Manitoba markets must supply the vast majority of the visits. (This latter comment applies equally to the concept of a "resort hotel complex" where Tourism Manitoba studies confirm that even a rural resort will have to obtain over 80% of its visits from Manitoba residents.)

Tables H-1, H-2 and H-3 provide an overview of existing attractions in the Winnipeg area broken out by three levels of annual visitation:

- a. attractions with 5,000 to 40,000 visits per year;
- b. attractions with 60,000 to 150,000 visits per year;
- c. attractions with over 150,000 visits per year.

The apparent target for annual visitation to the "public" riverfront areas of the site is probably well in excess of 150,000 visits. The evidence on available attractions underlines the challenge involved in achieving such visitation levels on a sustained basis with significant year-round participation.

Many of the attractions and themes examined above will stimulate weekend use of the East Yard area on a year-round basis through appeal to an array of interest groups living throughout the city and province. It is important also to consider potential appeal to other groups, e.g., residents of the intensive apartment developments in the Broadway/River Avenue/Osborne and other downtown areas; school groups; office workers located in the downtown; tourists visiting the city throughout the year.

TABLE H-1

WINNIPEG AREA ATTRACTIONS WITH 5,000 TO 40,000 VISITS ANNUALLY

Attraction - Visitation Levels	Visitor Characteristics
DALNAVERT - 1984: 9,133	Year round operation. Visits range from 1,500 to 1,600 per month in July and August, to 200 to 300 in November. About one-third of annual visits in July and August; during this period under 30% of visits from Manitoba (22% from Winnipeg). School groups 40% of total annual visits.
RIEL HOUSE - 1984: 7,300	Summer operation. Visits about 1,200 to 2,100 per month, with peak level of 200 per day on some Sundays. About 50 to over 70% of visits from Manitoba; most remaining visits from other provinces. School groups less than 20% of all visits.
LIVING PRAIRIE MUSEUM - 7,000 to 9,000/season	Summer operation. Average about 100 per day, with peak of up to 600 on Sundays or holidays. Often receive up to 250 school children in one day. School groups 44% of visits.
FORT WHYTE CENTRE FOR ENVIRONMENTAL EDUCATION - 1984: 25,000 - 1985: 30,000 (target) - long term: 50,000 (target)	Year round operation. Peak on Sundays. Receive about 500 visits per weekend and about 150 school children in a busy week-day. About 97% of visits from Manitoba (85% from Winnipeg); school children about 52% of visits.

TABLE H-2
WINNIPEG AREA ATTRACTIONS WITH 60,000 TO 150,000 VISITS ANNUALLY

Attraction - Visitation Levels	Visitor Characteristics
<p>ST. BONIFACE MUSEUM - 1984: approx. 70,000 (only 8,000 a few years ago)</p>	<p>Year round operation. Peak at 1,300 to 1,400 per day; weekends. Over 50% of visits from outside Manitoba. From May 18 to 24, 1985, were 1,229 visits, with peak at 260 per day; excluding school and River Rouge groups, 6% to 28% of visits from Winnipeg; other Manitoba less than 12%; school groups from 18% to 69% of weekday visits; River Rouge from 15% to 36% of visits (average 26% for the week).</p>
<p>PLANETARIUM - 1984/85: 92,950 - 1983/84: 102,777 - 1982/83: 104,944</p>	<p>Year round operation. Peak on Sundays at 200 to 500 visitors/day. Most popular in summer (61% of non-school visits from May to September). In summer 1984, 57% of non-school visits from Manitoba (43% from Winnipeg), 27% from USA. School groups are 33% of year round visits.</p>
<p>LEGISLATIVE BUILDING - 1984/85: 113,380 (guest book entries, includes tours)</p>	<p>Year round operation. Peak in summer at 16,850/month (August), with 70% of visits in May to September; average 5,000 to 6,000 visits in other months. School children at 14% of all visits (32% in May, 25% in June and April); 41% of school visits from Winnipeg and 34% from other Manitoba.</p>
<p>LOWER FORT GARRY - 1984: 97,996 - 1983: 106,715 - 1981: 147,819 - 1979: 129,783 - 1977: 121,844</p>	<p>Summer operation only; peaks in July-August when weekends about 60% of all visits (tour bus operators bring in 200 to 240 per weekend). Weekends 40 to 50% of visits in May, during school year. In 1984, 11,745 visits by commercial river boat. About 60 to 65% of visits from Manitoba (50% from Winnipeg); school groups about 15% of total visits. Low level of repeat visits per year.</p>

TABLE H-3

WINNIPEG AREA ATTRACTIONS WITH OVER 150,000 VISITS ANNUALLY

Attraction - Visitation Levels	Visitor Characteristics
MUSEUM OF MAN & NATURE - 1984/85: 236,786 - 1983/84: 215,185 - 1982/83: 224,906	Year round operation, summer most popular (56% of non-school visits from May to September). In summer 1984, 34% of non-school visits from Manitoba (25% from Winnipeg), 30% from USA. School groups are 18% of year round visits; complimentary are 18% of year round visits.
RED RIVER EXHIBITION - about 300,000 per year	Exhibition runs for 10 days; approximately 96% of visits from Winnipeg.
ASSINIBOINE PARK - zoo in 1984: 675,000 - Conservatory: approx.300,000-400,000 - Conservatory Cafeteria: approx.150,000	Approximately 85 to 90% of zoo visits from May to August (150,000 to 200,000 per month); only 5% from November to February). The conservatory cafeteria seats about 65 people; year round operation, with Sundays and May to September most popular periods. Approximately 75% of annual visits to Conservatory occur in summer.
FOLKLORAMA - approx. 500,000	One week in August.
FESTIVAL DU VOYAGEUR - approx. 300,000-400,000	One week in February.

Specific related developments should be considered, such as a "winter recreation" corridor along the Assiniboine River between The Forks and the Legislative Building, serviced (in terms of restaurants, sports facilities, etc.) from the East Yard development area.

Review of potential visitation characteristics indicates that the present opportunity to develop the East Yard site could be fortuitously combined with present opportunities to develop a major new "theme" event in the Winnipeg region. This site calls for a basic emphasis on its unique historic and riverfront features; however, such an emphasis does not appear to prevent or restrict the simultaneous opportunity for providing new types of year-round recreation/entertainment/sport and marketing facilities which the Winnipeg market appears ready to receive.

2. COMPARISON OF ATTRACTIONS

The 10 attractions discussed in the Winnipeg Tourism Development Study are compared in Table H-4. Noteworthy positive and negative features are highlighted. The data presented are taken directly from the Tourism Study. In some cases, especially for the land extensive attractions, i.e., water amusement area, themed midway rides, children's village, scaled down versions could be developed that would be more appropriate for the East Yard.

It is apparent from Table H-4 that the most appealing attractions for the East Yard of those considered in the Winnipeg Tourism Development Study are:

- Interactive Heritage Centre (sometimes called Historical Interpretive Centre)
- Ethnic Pageants/Entertainment Centre (sometimes called Multicultural Centre)
- Farmers' Market
- Tourism Orientation Centre.

Scaling down land extensive attractions would not alter this finding, since these attractions all occur mainly in the summer.

TABLE H-4

SUMMARY OF TOURISM/ENTERTAINMENT ATTRACTIONS IN WINNIPEG TOURISM DEVELOPMENT STUDY

Attraction	Interactive Heritage Centre	Ethnic Pageants/ Entertainment Centre*	Farmers Market	Antique/ Flea Market	Arts/ Music Part	Science Centre	Tourism Orientation Centre	Water Amusement Area	Themed Midway Rides	Children's Village
Amenability to historic/cultural/river front theme	VERY GOOD -HISTORIC	VERY GOOD -CULTURAL	good -historic	GOOD -HISTORIC -CULTURAL	GOOD -CULTURAL -RIVERFRONT	not good	LINKED TO ALL ATTRACTIONS	perhaps riverfront	not good	not good
Projected visitation (tourism study) in first year to East Yard	231,000	274,000	257,000	184,000 -	239,000	367,000 +	not an attraction alone	280,000	199,000 -	228,000
Land Required for Activities (acres)	< 1 acre	< 1 acre	< 1 acre	< 1 acre	2 acres	< 1 acre	< 1 acre	15 acres	15 acres	15 acres
Building Space Required (sq.ft.)	10,000	18,800	34,500	23,500	24,000 for amphitheatre 10,000 for studios	50,000	1,000	?	10,000 for Space Adventure Building	12,000 for Children's Village Building
Amenability to Reusing Existing Buildings	good	good	good	good	possibly for studios	likely need new building	good	likely need new buildings	likely need new buildings	maybe
Seasonal Orientation	year round	year round	year round	year round	mainly summer, some year round	year round	year round	mainly summer, some year round	mainly summer, some year round	mainly summer, some year round
Capital Costs (\$ million 1985)	\$1.5 may be underst. due to low /sq.ft. building costs	?	?	less than Farmers' Market	\$2.2	\$11.6	\$0.4	\$16.2	\$14.7	\$3.8
Government Capital Support Needed (\$ millions)	\$1.5 +	MUCH LESS THAN CAPITAL COSTS, IF ANY	much less than capital costs, if any	much less than capital costs, if any	\$2.2	\$11.6 -	\$0.4	none	none	none
Government Operating Grant Needed	\$33,000 IN 1st YEAR, DECLINING TO 0 IN YEAR 5 IS ONGOING REQUIREMENT	MAYBE IN 1st YEARS BUT NOT LIKELY ON AN ONGOING BASIS	none likely required	none likely required	\$220,000 in 1st year, ongoing requirement of similar amount	\$400,000 in 1st year, smaller (but still large) ongoing requirement	\$28,000 in 1st year, ongoing requirement of similar amount	none	none	none
Operating Jobs										
-Full-time	4	3	6	2	3	4	2	5	5	5
-Part-time	11	5	3	3	4	16	3	40	42	36
Developer Orientation	requires public sector developer	can be developed by ethnic groups with govt. financial assistance	COULD BE DEVELOPED BY PRIVATE SECTOR	COULD BE DEVELOPED BY PRIVATE SECTOR	requires public sector developer, maybe private sector developer for studios	requires public sector developer	requires public sector developer	COULD BE DEVELOPED BY PRIVATE SECTOR	COULD BE DEVELOPED BY PRIVATE SECTOR	COULD BE DEVELOPED BY PRIVATE SECTOR

Legend: BOLD UPPERCASE and/or + = noteworthy positive features
 Bold lowercase and/or - = noteworthy negative features

3. REVIEW OF SELECTED PRIVATE SECTOR ATTRACTIONS

Two private sector attractions that received substantial attention as prospects for the East Yard were a Farmers' Market/Public Market and a Water Amusement Area. The following are key observations pertaining to each.

Farmers' Market/Public Market development, involving 30,000 to 50,000 square feet of leasable space, has been identified as a potentially attractive private sector opportunity at present for the downtown area. Considerable variations appear to exist, however, with respect to assessments of the proper target markets and the necessary level of government capital cost assistance. Experience in other cities indicates that such a development could play a lead role for an undeveloped downtown area such as this site provided that it is targeted towards the overall city market and is associated with festive retailing techniques appropriate to the Winnipeg situation.

This development could be public or private sector oriented; it could be located in existing space (CN Express or Training Centre Buildings) located in the riverfront areas of the site; following suggestions made in other studies, it could be combined with an Ethnic Pageants/Entertainment Centre, as well as an attractive atrium plus necessary parking facilities. It is likely that such a development could proceed on a land lease basis, and that a modest base rental payment might be earned (along with participation rent related to the project's profitability, which is expected to increase in future years).

One potential concern that an East Yard location might involve is undesirable delays and/or risks related to this project's preceding other development on this large site. It is expected that this function is likely to proceed in the near future and will not be feasible in the East Yard if a similar project is located elsewhere in the downtown area; in addition, it would appear that the location of this facility may simul-

taneously resolve location of an Ethnic Pageants/Entertainment Centre that would also be developed by private sector interests.

Future consideration of this function for the East Yard would probably require discussion and negotiation with prospective developers in order to determine potential levels of interest and commitment. The East Yard site offers excellent low cost parking, riverfront scenic features, and existing structures suited for this type of re-use; special considerations might be given to such a project as a major lead development for the site; finally, experience in other cities underlines the fact that successful projects of this type typically rely upon visitors from throughout the city (rather than from the local neighbourhood) who come to this specific destination by car or bus (particularly after work or on weekends), and thus the project should not be harmed by such a location.

Water Amusement Area development (including wave pool, water slides, play area, etc.) has also been identified as a potentially attractive private sector opportunity at present for Winnipeg -- particularly if provided within a suitable structure that facilitates year-round use; such a facility could also be developed by the public sector as part of a "leisure centre" concept. The level of required government capital cost assistance remains unclear; however, such a function appears likely to proceed in Winnipeg within the next year as a private sector project.

Private developer interest has been indicated in using leased land in the East Yard, provided that the project is able to proceed expeditiously within the next year; such a project could be developed on either a stand-alone basis or as a component of a broader multi-use set of facilities (the latter would be far more preferable to the overall site's development). Two facilities have been developed by the City of Calgary as part of leisure centres which include other recreation/sports facilities, e.g., arenas and gymnasium as well as other day-activity sports. The wave pool facility is stated to be the most profitable recreation/entertainment item in the West Edmonton Mall. Water amusement park projects are under consideration or development in at least B.C., Saskatchewan and Ottawa; one of the Ottawa developments is stated to incorporate an historic motif.

Two year-round "leisure centre" facilities developed in 1983 by the City of Calgary provide evidence of the success of smaller indoor "wave pool" oriented water park facilities (10,300 to 11,600 sq.ft. pool size that can accommodate 700 people at peak periods with depth ranging from a few inches to 8 feet, and with waves up to 3.5 feet, gross floor area of up to 38,450 sq.ft.); the water area includes two shallow pools as well as other water activities, tropical plants and trees and other amenities. Each "leisure centre" facility also includes two arenas as well as a "sports hall and gymnasium" area. Admission charges are set to maximize access, i.e., \$6 per adult admission to the total centre, and to service the local residents; total attendance (despite the recession and the competition) has been 750,000 to 800,000 per pool, and operating revenues directly from the pool significantly exceed annual costs directly related to the pool (excluding interest and depreciation). Each overall facility recovers about 62 to 80% of its operating costs (excluding interest and depreciation) from revenues. The wave pool is acknowledged to be the key attraction; in order to sustain interest it is necessary to upgrade the facility on a regular basis with new features.

Discussion with other experts indicates that the wave pool concept originated in Europe. Various scales and designs have been developed for indoor facilities. The West Edmonton Mall pool is the largest indoor facility in the world; admission charges are \$12 per adult, and the facility operates as a major attraction (rather than a service centre). Dome structures are considered to be very desirable by some experts.

A specific private sector approach for Winnipeg might require 3.1 acres for a domed facility having an 18,000 sq.ft. wave pool (4-foot waves) as well as eating and concession areas; capital cost is estimated at about \$13.5 million (excluding land); financing is proposed to include approximately \$3.5 million equity, a \$2 million government (Tourism) grant, and the balance by a commercial mortgage (59% of cost) that would be repaid within ten years. Projected visitation approximates 600,000 with about 30% during winter, a similar per cent during summer, and the balance spread over spring and fall periods. This facility is estimated to require about

5.6 acres of surface parking (750 peak hour vehicles; 8,013 peak day visitors). It is estimated to provide an annual return on equity at 18%. Manitoba officials have noted that the Feasibility Study Assistance Program sponsored by Tourism Manitoba may provide up to 60% of study costs to a maximum of \$10,000 per study to assist in funding site specific feasibility studies for development or expansion of resort facilities, lodges or attractions; in addition, officials have noted that the Province of Manitoba's Venture Capital Program may provide 35% of the capital on a joint participation basis with private investors in approved projects.

Future consideration of this function for the East Yard would clearly require additional feasibility analysis, and should probably include discussion and negotiation with prospective developers. In order to be attractive for this specific development, such a project would require careful design and planning directed at ensuring that the water facility is compatible with overall site planning principles as well as highly complementary to the development of other targeted projects. In essence, a "mixed-use" approach would be needed whereby this project's lead role was clearly established within an overall program. An indoor water facility of this type will clearly generate significant year-round visitation -- particularly among people under 18 years of age and families -- relative to (say) use of an equivalent area for housing; however, such a development is unlikely to generate lease revenues (particularly in the initial years) close to those anticipated from housing developments on the same land, unless the Development Corporation participates in the equity returns.

ATTACHMENT I

EAST YARD FOCUS BY ETIENNE GABOURY

EAST YARD FOCUS BY ETIENNE GABOURY

DEVELOPMENT FOCUS

The East Yard is too important to let it be planned and developed by default, without a sense of purpose and vision. It is too important because it is the most significant historical location in the City of Winnipeg; it is also the last and only downtown site fronting on the river, and it is very large. Whatever we do must have a sense of purpose; it must be coherent and attain the highest level of excellence.

Only in doing so shall we have responded adequately to the uniqueness and inherent qualities of this site. We have here a wealth of potential for a meaningful and exciting development and it can only be realized if we set our goal for a project of national prominence and maintain our course to achieve it.

Recognizing and celebrating the uniqueness of the site may well be the key to its successful and meaningful development.

The characteristics of the site have been fully identified in the Planning Determinants and visually demonstrated in the Composite Site Analysis and the Conceptual Framework. We must now raise our sights to another conceptual level and begin to give direction and meaning to these intrinsic latent forces.

This is the second stage of the conceptual process and is provided only as an orientation and focus for the quality and direction the development should take. It is not intended as the final or finite resolution for all or any part of the project.

A REGIONAL DEVELOPMENT

Fully recognizing and responding positively to our region offers the greatest potential for uniqueness and freshness of approach. Our extreme temperatures, our prevailing northerly winter winds with the result-

ing sculptural snow drifts, our prominent but everchanging sunlight, the dramatic prairie flatness should, we submit, affect us in the way we program our activities, plan our site and design our structures. We have an opportunity here of being unique by simply responding to our environment rather than by borrowing styles from "down east" or abroad. We have here an opportunity of doing a prototype development that responds both programmatically and physically to the site and to its total environment. A truly ecological resolution.

The overall plan, the layout of the facilities, the orientation of structures and spaces, the treatment of facades, the forms of the buildings and the use of landscape and vegetation would all take the environment as the main inspiration for design. This development would be a natural and identifiable revelation of the place and its environment and it would be unique to Winnipeg.

WINNIPEG WINTER WONDERLAND

If we program as well as build for our environment, we may find that a sensitive response to the environment factors would encourage us to provide environments (and linkages) that allow for special or sustained winter activities and, conversely, activities that require special environments. We must compensate for our harsh long winters by concentrating and integrating our programs for optimization of space, energy and synergism. We know, for instance, that there is a need for additional recreational, sports and entertainment facilities for this city.

If we were to group together, under one roof, a whole series of recreational and sports activities (e.g., a water park, a miniature golf course, a driving range, racquet sports courts, lawn bowling courts, horse shoe courts, volleyball courts, a children's playground and activity centre, gymnasias, exercise tracks, curling rinks, ice hockey rinks, bath houses, fitness centres, performance spaces, art exhibition spaces, etc.) and link these together with a central multi-purpose, solarium/atrium, we would have the ingredients of a magnificent winter wonderland. We

are thinking here of an enclosed winter park that allows for a harmonious blend of spaces and programs for relaxation, recreation, entertainment and sports.

Interfaced with these enclosed facilities would be the open air facilities such as skiing, skating, tobogganing, snow surfing, ice sculpting, etc.

This complex would include dining and beverage facilities, performance stages and might also include a sculptural garden/park.

Ideally, this complex would be linked to a resort hotel with all the appropriate service facilities and specialty shops.

Similarly, it could be linked to a residential complex.

THE HIGHLINE FEATURE

The highline and its berm offer a rare opportunity for transforming a negative element into a positive feature. Rather than attempting to hide or negate it, why not develop it into a major landscape feature. We would increase the height and width of the southeast slopes and line it with trees, predominantly spruce.

This would provide for an immediate definition of the East Yard precinct; it would reduce the noise pollution, reduce the dangers of accidental derailment and spillage and provide a future base for the additional CN track should it be required.

Located as it is, on the north and west side of the site, it would also be a subtle recall of the northern tree line and the wind barriers of our western farms.

In the same spirit as the highline berm, the prairie image of the site would be dramatized by including a major contrasting escarpment on the site. Since it may be advisable to soften the contours of the river embankments to ensure their stability and allow for a better visual and pedestrian link to the waters, this earth fill could be used for the berm and the escarpment.

PORTALS AND GATES

Old cities are often famous for their "walls" and with these walls their "gates" or "portals". One thinks of the London Gate, la Porte St. Denis in Paris, Bab Zuwaila in Cairo and many others. The East Yard can easily be pictured as a walled precinct with a moat and the entrances to this precinct as major events similar to the cities of the past. The strengthening of these transitional elements reinforces the sense of arrival to a special place. We believe gates, portals and bridges should be expanded and enriched into delightful architectural or landscape features and each one should be unique. (Note: for possible location of portals, see the Conceptual Framework.)

We already have one such portal in the dome and concourse of the station; it needs only to be recognized and integrated in the East Yard pedestrian network. The Provencher Bridge is another but it requires major modifications and upgrading to make it acceptable.

PORTAGE AVENUE EXTENSION

The northern part of the site (the CN retained lands) is uniquely located between the high density urban fabric of the Portage/Main precinct and the Red River. Consistent with our Conceptual Framework, this area of the site suggests a strong bond between these two opposing poles. There lies in this special relationship an opportunity to literally "bridge the tracks" with a major structure (or perhaps a London Bridge) that ensures a visual as well as a functional link between the two precincts. The office buildings so located would be another manifestation of the gateway linking downtown to the Yard. We also envision an impressive vista from this "bridge" overseeing the river and cathedral to the southeast and highrise structures to the northwest. This urban fabric, culminating over the tracks, would diminish in scale and density to possibly a low-rise hotel complex extending along the parks and the banks of the river.

A MAJOR FLAGSHIP ELEMENT

The question arises as to the need for a major flagship element or signal that would focus our attention to the area. It may indeed not be necessary if other developments on the site are sufficiently strong to give the site the sense of identity and place it should have.

There is, however, a potential for such an element provided it is done with dignity and taste, provided it is a work of great distinction and of the highest calibre.

There are thematic lines that clearly emerge from this site, the interweaving of which would be compelling as a visual statement. There is water, the junction of the rivers; there is winter with the cold, the snow and ice; there is the dramatic changes of seasons; there is the fort, the historical gateway to the west; there are the cultural traditions and the expanding ethnic fabric of our community; there is the flatness of the prairies.

This conjures esoteric images of abstract fort/towers shimmering out of the water and ice, a mirrored structure reflecting the greens, reds, oranges and whites of the seasons, the deep blues and crimson reds of the Manitoba sky and, as a summation, a reflection of ourselves and the site around us.

One could envision a dramatic crystallized structure expressing the wealth of our past, the scintillating beauty of our environment and the price of our heritage.

INTERPRETIVE CENTRE AND SON ET LUMIERE

The East Yard site is historically unique in that there is so much that has occurred there, but so little evidence of this rich history except the confluence of the rivers and the rail yards. There is, therefore, an urgent need to provide an interpretive centre that will present the history and highlights of the site.

This interpretive centre should be comprehensive, sophisticated and exciting in its program, presentation and environment; it should also be strategically located.

It is also important that it not be isolated but linked to other functions such as a visitor reception and information centre, food and beverage facilities and specialty boutiques.

As a feature and main attraction of the interpretive centre, we are suggesting a "Son et Lumiere", an audio-visual presentation of the history and features of the site. A Son et Lumiere uses the site as a setting to recreate and describe with dramatic lighting and sound the events that occurred there.

Son et Lumiere's have been successfully realized throughout the world; some noteworthy examples are: the pyramids in Egypt, Teotihuacan in Mexico, Chateau Chambord in France, and just recently, the Parliament Hill in Ottawa.

The historical wealth and environmental qualities of the Forks and the East Yard offer incredible potential for an impressive Son et Lumiere. Imagine the dramatic unfolding of major historical events like the natives singing and dancing on the riverbanks, the arrival of the "courreurs de bois", the fur traders, the building of the forts, the construction of the first hospital across the river (St. Boniface Museum), the construction of the cathedrals, the railways, the station, the bridges, the Fort Garry Hotel, the Winnipeg skyline.

Now imagine this whole presentation set in a wintery landscape and you are sitting comfortably in a glazed dome with this beautiful panorama unfolding before you as the theatre slowly rotates to the proper setting. Imagine also dining while this is unfolding.

What we are proposing is a Son et Lumiere unique to Canada, Manitoba, Winnipeg, and to the East Yard.

There are many possible locations on the site for the interpretive centre and the Son et Lumiere such as in the existing buildings, and on the rooftop of the Johnson Building or at the South Point.

Consideration should be given, however, to placing the interpretive centre on the south point in a landscape setting and placing the Son et Lumiere at the upper level of the CN bridge and retaining the lower level for weather protected access (and perhaps vehicular service access) to the South Point. This would allow a maximum exposure of the dome and a 360° exposure of the site; it would also provide the opportunity of entering the interpretive centre at a lower level and exiting at the upper level through the Son et Lumiere theatre.

These proposals, we submit, would warrant further technical and cost feasibility studies.

ATTACHMENT J

OPTION-BY-OPTION ANALYSIS OF
THREE MAIN DEVELOPMENT PLAN OPTIONS

OPTION-BY-OPTION ANALYSIS

1. OPTION 1

This option emphasizes park and housing uses on the public lands; the park uses include historical/cultural functions (e.g. a rail museum/interpretive centre, the Parks Canada project, related historical elements).

The park would be located adjacent to the proposed Parks Canada Park and would total approximately 12 acres along the Assiniboine River. This park implies the retention and renovation of the B&B building as a rail museum/interpretation centre with retention of a rail line to this building; the three other buildings and the steam plant would be demolished to accommodate the park. The South Point would be retained for passive park uses, with pedestrian access primarily over the eastern rail bridge.

Access off Main Street is through The Bay's parking lot and requires a new underpass under the main line.

The housing precinct would contain approximately 24 acres and could eventually generate 1,900 housing units (at 80 units/acre), the largest quantity of housing of all options examined; approximately 1,300 of these units would be located in the central area between the roads, and the balance would be located between the main line and the main north/south access road.

The potential schedule for development of this option is shown in Table J-1.

TABLE J-1
POTENTIAL DEVELOPMENT SCHEDULE -- OPTION 1

Major Activities	Summer 1987	Summer 1988	Summer 1989	Summer 1990	Summer 1991
Removal/Clearing	<ul style="list-style-type: none"> - all rail activity other than steam plant and related track - all buildings other than B & B 	<ul style="list-style-type: none"> - steam plant and related track - Fort Garry Curling Club - buildings between Pioneer/Water 		<ul style="list-style-type: none"> - Motor Sales building 	
Under Construction	<ul style="list-style-type: none"> - Parks Canada project - Provencher Portal - Berms 	<ul style="list-style-type: none"> - Historical/Cultural (B & B renovation) - public lands landscaping - CN office building 	<ul style="list-style-type: none"> - Initial Housing underpasses (York, St. Mary and Assiniboine) 	<ul style="list-style-type: none"> - Additional Housing underpasses and portals - Commercial (CN) - Other Commercial (CN property) 	<ul style="list-style-type: none"> - Additional Housing - Other Commercial (CN)
Open For Use	<ul style="list-style-type: none"> - Parks Canada National Historic Park - Provencher Portal - pre-built access roads to Parks Canada project (includes relevant portion of York/St. Mary) - berms 		<ul style="list-style-type: none"> - Assiniboine River landscape Park/Historical (South Point) - CN office building 	<ul style="list-style-type: none"> - Initial Housing and road system (other than underpasses) 	<ul style="list-style-type: none"> - three new underpasses and portals - more housing Commercial - some other Commercial

1.1 Advantages re Option 1

1. Preserves the riverfront for less intensive park uses.
2. Minimizes public sector expenditures for historical/cultural/recreational uses.
3. Generates the largest quantity of housing (implies major private sector investment).

1.2 Disadvantages re Option 1

1. Unlikely to meet the objective of establishing a nationally prominent site (lacks distinctive elements).
2. Implies a passive development with lower levels of local and tourist use and visitation than the other options, i.e., likely use related primarily to local housing residents.
3. Minimizes year-round active riverfront use by public.
4. Opportunities for private sector investment are restricted primarily to housing; timing of development will be dictated by local housing market conditions and will extend well beyond the initial five year period. In addition, constraints may exist in developing those portions of the housing assumed to be located near the CN main line.
5. Major problems expected in generating sufficient lease and other incomes to cover ongoing public sector operating costs (taxes and public development agency costs) within the next five to ten years; in particular, the extensive river parkland area implies significant ongoing tax and maintenance costs which the new public development agency cannot easily recover.

2. OPTION 2

Option 2 reflects more intensive public sector development than Option 1; it retains, however, the roadway separation between riverfront and housing uses that was assumed in Option 1. Option 2 assumes an incremental, phased approach which will focus public resources in the first five years near the riverfront with the central lands held for market oriented development as market conditions permit. Initial public sector projects are expected to focus on the B&B building and Johnson Terminal building areas (see potential schedule as set out in Table J-2).

Access off Main Street continues to be through The Bay's parking lot and a new underpass, as in Option 1.

The housing component is reduced to about 14 to 18 acres and would generate about 1,100 to 1,400 housing units. By contrast, the riverfront development area along the north side of the Assiniboine River is increased to 15.6 acres; a major portion of this area would be used for historical/cultural/recreational/festive functions.

Option 2 focuses public sector attention on the southern riverfront area and those activities that might be suited to the existing CN structures, e.g., marketing or heritage activities in the two smaller structures by the tracks, possible office/residential/hotel activities in the Johnson Terminal, and a rail museum in the B&B facility. This area would tend to focus on projects which require public sector leadership and support; new recreation or sports related activities (other than river related activities) would not tend to be developed in this area so long as all of the existing buildings are retained. (It is possible, of course, that the approach suggested in Option 2 might be pursued without retaining all of these buildings -- in which case additional opportunities might emerge.)

TABLE J-2

POTENTIAL DEVELOPMENT SCHEDULE -- OPTION 2

Major Activities	Summer 1987	Summer 1988	Summer 1989	Summer 1990	Summer 1991
Removal/Clearing	<ul style="list-style-type: none"> - All rail activity other than steam plant and related rail 	<ul style="list-style-type: none"> - steam plant - Fort Garry Curling Club - buildings between Pioneer/Water 	<ul style="list-style-type: none"> - initial Housing underpasses (three) - Festive/Cultural (2 buildings near track) 	<ul style="list-style-type: none"> - Motor Sales building 	<ul style="list-style-type: none"> - Additional Housing - other Commercial (CN)
Under Construction	<ul style="list-style-type: none"> - Parks Canada project - Provencher Portal - Berms 	<ul style="list-style-type: none"> - public lands, B & B building, and Johnson Terminal under construction/landscaping - CN office building - Commercial interpretive centre (York-St. Mary "island") 	<ul style="list-style-type: none"> - initial Housing underpasses (three) - Festive/Cultural (2 buildings near track) 	<ul style="list-style-type: none"> - more Housing underpasses and portals - Commercial 	<ul style="list-style-type: none"> - Additional Housing - other Commercial (CN)
Open For Use	<ul style="list-style-type: none"> - Parks Canada National Historic Park - Provencher Portal - Berms - Pre-built access to Parks Canada project - Includes relevant portion of York/St. Mary 	<ul style="list-style-type: none"> - Historical/Cultural/Recreational (B & B, Johnson Terminal) - Park/Historical (South Point) - CN office building - Commercial interpretive centre 	<ul style="list-style-type: none"> - Festive/Cultural (2 buildings) - initial Housing and road system (other than underpasses) 	<ul style="list-style-type: none"> - three new underpasses and Portals - more housing - Commercial - some other Commercial 	

2.1 Advantages re Option 2

1. Focuses additional public sector investment along the southern riverfront in the first five years, thereby enhancing prospects for higher visitation and a more distinctive development.
2. Separates out the central area of the public lands and allows this area to be developed in a variety of ways (recreation, cultural, etc.) as well as housing. This creates the potential for additional public use and visitations to the site relative to Option 1.
3. Allows for either retention or removal of existing buildings, depending on their suitability for a particular development.
4. Avoids commitment to any "grand vision" and thus respects the present reality of scarce public sector resources, without precluding the potential for a substantive mixed use development.

2.2 Disadvantages re Option 2

1. The holding costs of the central public lands, unless kept in CN ownership, will be a substantial drain on scarce resources until they are developed; however, it is impractical to leave this central area in rail use while at the same time seeking to achieve significant public use of the southern riverfront areas.
2. Road access off Main Street through the new underpass option delays use of new Main Street access (see Option 3) and reduces the potential size of the central area for future private sector development; this approach may therefore place greater initial pressure on public sector resources than either Options 1 and 3.
3. Suggests realistic potential to use existing buildings, even though at least two of these buildings (B&B, Johnson Terminal) may be difficult to use in a manner that attracts public and private sector funding.
4. Commitment to the eastern roadway through the public sector lands may inhibit effective integration throughout the site of new recreational/cultural uses with the riverfront as well as all-weather pedestrian access (i.e., this road tends to suggest different precincts, and -- in particular -- a private housing neighbourhood in the midst of the site, and such a separation of functions may inhibit achievement of planning principles related to pedestrian access and the desired public place/riverfront focus).

3. OPTION 2(a)

Option 2(a) modifies Option 2 to examine a possible delay (subject to agreement with CN) of most rail clearing and relocation until mid-1989 (rather than the 1987 date assumed in other options); this approach might be adopted to delay redevelopment of the central portion of the East Yard until completion of the new underpasses (Assiniboine Avenue and the York/St. Mary extension).

Figures 4-2 to 4-6 have already highlighted the schedule for this option.

Option 2(a) requires construction by summer 1988 of temporary road access to the Parks Canada project; this access is later discarded when the York/St. Mary extension is opened in 1991. It also implies continued CN use of the railyard area until relocation and clearing commence in 1989.

3.1 Advantages re Option 2(a)

1. Delays (by about 2 years) the date when the new public development agency must assume responsibility for rail clearing and relocation as well as ongoing tax maintenance and other costs related to the central area of the public lands; (any cost savings, however, are contingent on CN continuing its normal rail yard use during the delay period; and thus continuing to bear tax and other cost responsibilities).
2. Provides clear basis for delay, as implied in Option 2, for planning, funding and construction of new riverfront festive/cultural/recreational activities at the Forks.
3. See general Advantages Re Option 2.

3.2 Disadvantages re Option 2(a)

1. Continues active rail activity in the East yard for two additional years (until summer 1989); this is likely to inhibit use of the new Parks Canada project as well as redevelopment of The Forks riverfront area during this period.
2. Removes any realistic prospect for access to The Forks area until summer 1990, due to continued rail yard activity in the East Yard (in contrast, Option 2 retains at least the possibility that the new site roads to The Forks area might be pre-built before completion of the various new underpasses); this is likely to delay the ability of the public development agency to recover its extensive land carrying costs (through leases) related to the riverfront area located north of the Assiniboine River (including existing buildings thereon).

4. OPTION 3

Option 3 combines park, housing and a high level of recreation activities. It is the most intensive use of mixes of the three options, and allows for development to proceed throughout the site in a staged basis (see potential schedule Table J-3). Implications of this option are as follows:

1. The B&B building and the Johnson Terminal buildings are removed, thereby increasing the flexibility to develop new festive/recreation/cultural features on a year-round basis in the riverfront area.
2. As in the other two options, the riverbank park connection is retained and a historic/interpretive centre is developed; this centre, however, is suggested for the South Point/eastern rail bridge area.
3. The two most western structures could be retained for redevelopment or demolition, depending on circumstances.
4. This option implies adoption of the alternative land ownership approach for CN's retained lands (i.e., CN holds some lands south of York, and the public development agency holds additional lands north of York).
5. This option allows for adoption of an alternative land ownership approach for CN's retained lands (i.e., CN holds some lands south of York, and the public development agency holds additional lands north of York).
6. Access to the site off Main Street differs from Options 1 and 2, with a road from Assiniboine Avenue moving south to an existing underpass near the Assiniboine River. This approach reduces public sector costs and allows for opening of new Main Street access in the summer of 1988 (versus summer 1991 under all other options), it provides riverfront access that tends to be more attractive than the tunnel access required for other underpasses; it also emphasizes that this road access is intended for low speed local use.

TABLE J-3
 POTENTIAL DEVELOPMENT SCHEDULE - OPTION 3

Major Activities	Summer 1987	Summer 1988	Summer 1989	Summer 1990	Summer 1991
Removal/Clearing	<ul style="list-style-type: none"> - all rail activity other than steam plant and related track - all buildings 	<ul style="list-style-type: none"> - steam plant and related track - Fort Garry Curling Club - buildings between Water and Pioneer 			
Under Construction	<ul style="list-style-type: none"> - Parks Canada project - Provencher Portal - Berms - landscaping of all riverfront - festive (festive market) 	<ul style="list-style-type: none"> - public lands land-scaping - CN office building - Initial Housing/Recreational - Information Centre (York-St. Mary "island") 	<ul style="list-style-type: none"> - more housing - York-St. Mary underpasses - Festive/Cultural Recreational (major facility) 	<ul style="list-style-type: none"> - Motor Sales building - Additional Housing Recreational - underpasses and Portals - Commercial - Other Commercial (CN) 	<ul style="list-style-type: none"> - Other Commercial (CN)
Open For Use	<ul style="list-style-type: none"> - Parks Canada National Historic Park - Parks around riverfront - Provencher Portal - Berms - Pre-built access roads to Parks Canada and Festive Market (includes underpass to Main St. and relevant portions of York-St. Mary) 	<ul style="list-style-type: none"> - Historical/Cultural/ (South Point and Bridge, Park area along Assiniboine River) - Information Centre - CN office building/ Initial Housing/ Recreational 	<ul style="list-style-type: none"> - Festive/Cultural/ Recreational - more Housing/ Recreational 	<ul style="list-style-type: none"> - York-St. Mary underpasses and Portals - more Housing/ Recreational - Commercial - some other commercial (CN) 	

4.1 Advantages re Option 3

1. Potential for generating the highest visitation levels of any option; it also enhances the feasibility to establish a nationally prominent development in the southern riverfront area, as well as significant year-round use.
2. Road access throughout both the eastern and western areas could be developed within 2 years, without waiting for new underpasses to be built; this facilitates development throughout the public lands.
3. Offers prospects for the highest degree of integration of site functions, and best prospects to develop all-weather public pedestrian access throughout the site.
4. Enhances potential to stimulate private investment in both the central and riverfront areas, thereby reducing future public sector carrying costs and improving the prospects for the public development agency to achieve financial self-sufficiency within five to ten years.
5. Offers prospects for public development agency to hold and develop the lands north of York that are suitable for Commercial/Residential and Visitor Information Centre uses.

4.2 Disadvantages re Option 3

1. Option requires strong private sector participation; and the extent of the private sector interest has yet to be investigated through public consultation and discussion.
2. Option emphasizes a commitment to remove at least two buildings, which may be questioned in settling on a Final Plan.
3. Use of the existing underpass from Main Street requires further studies to confirm costs relative to flood plain and bank stability requirements (present estimates indicate about \$300,000).
4. Option implies a need to ensure integrated development throughout the site; the feasibility of such an approach requires confirmation of the necessary commitments by the participants.
5. Option allows for adoption of land ownership arrangements whereby CN holds or develops some lands south of York that are adjacent to the rail line; such an arrangement requires further discussion to ensure that all relevant public sector interests are protected.