



City of Winnipeg
Water and Waste Department

Combined Sewer Overflow Management Study

PHASE 3 Technical Memoranda

Appendix No. 2

CONTROL ALTERNATIVES Site Investigation and Evaluation

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1. INTRODUCTION

Appendix No. 2, "Control Alternatives – Site Investigation and Evaluation" comprises the attached report entitled "CSO/High Rate Treatment Option: Site Inventory/Neighbourhood Evaluation", prepared for Wardrop/TetrES in 1996. The purpose of the study, which led to the report, was to identify sites with a potential capability to accommodate surface and near-surface facilities. This process comprised selection of prospective sites, followed by a visit and evaluation of their suitability.

The final outcome of the site "selection" process is discussed in Section 5.3.2.1, "Siting Considerations" of Phase 3, T.M. No. 1.



**CSO Storage/High Rate Treatment Option:
Site Inventory/Neighbourhood Evaluation**

**N.A. Stone
TetrES Consultants, Inc.**

April, 1996



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1. INTRODUCTION

The intent of the Combined Sewer Overflow (CSO) Storage/High Rate Treatment Site Inventory and Analysis is to evaluate potential sites near CSO outlets to determine the characteristics of, and facilities on these sites which might help or hinder the construction and operation of new treatment technologies in the City of Winnipeg. Opportunities and constraints in both physical and neighbourhood environs exist for each site; implementation problems can be avoided by identifying more problematic sites which might be met with public opposition or are not environmentally suitable. Such sites might require special mitigation or abandonment.

Public input is vital in the implementation of any scheme resulting in changes affecting the use of community lands and funds. Community interests are powerful forces which must be recognized in projects of this nature and can result in overwhelming support for, or opposition to a project. There is no substitute for the community input regarding their perceptions and feelings toward a public works endeavor.

The present assessment attempts to evaluate and categorize open spaces in the CSO catchment areas on two sets of tangible criteria:

- Neighbourhood Considerations Criteria
 - These evaluate the anticipated effects of construction and the presence of the technology on and around the specified site over both short and long-term periods.
- Site Physical Attributes Criteria
 - Certain locations may better suited than others for on-site treatment technology due to a fewer number of permanent structures or natural features which may interfere with site construction.

Both sets of criteria examine quantifiable pieces of data which can then be used to group the site attributes. The purpose is to illustrate what characteristics are common amongst sites,

and how sites which possess certain combinations of attributes are better suited for development than others.

1.1 CSO BACKGROUND

The discharge from Combined Sewer Overflows into the Red and Assiniboine Rivers several times per year has been identified as impacting on the water quality in the Winnipeg Region. Such overflow events result in the discharge of floatables into the river system, as well as increasing the concentration of indicator organisms (fecal coliform) in the river. Limits for the latter have been established, for dry weather conditions, for the Red River (primary recreation) and the Assiniboine River (secondary recreation).

The City has initiated the CSO Management Study to determine the impacts of wet weather flows on the rivers and to evaluate improvements which can be effected through treatment devices.

Alternatives for addressing CSO discharge include "no action", optimization of the existing system, the introduction of more structurally intensive technologies, or combinations of the aforementioned. Eight potential control options were identified in Phase 2 of the study and are being further assessed in Phase 3. Among the options are Subsurface Storage Tanks and High Rate Treatment, i.e., structurally intensive alternatives.

1.2 STORAGE/HIGH RATE TREATMENT OPTION

The Subsurface Storage Tanks would comprise an underground holding tank which intercepts CSO discharge in most small to medium storms and prevents it from entering the river system. Stored flows are held until they can be conveyed to a WPCC. A retention treatment basin (RTB) is a modification of the storage tank which would store some of the flows and permit

disinfection of an additional amount for direct discharge to the river. For the latter, chemicals would be added to the flows to be discharged to the rivers.

The Storage/High Rate Treatment facilities would be located at the downstream end of a catchment area, taking advantage of gravity feed and maximizing the amount of collection in the sewer district. The RTB was used as a surrogate for the Storage/High Rate Treatment facilities and, therefore, one basin unit was taken as having a footprint of 20 m x 50 m and would be in the order of 1 to 2 metres below grade.

2. STORAGE/TREATMENT SITES

2.1 SITE SELECTION PROCESS

Large open spaces are the most desirable locations for Storage/High Rate Treatment facilities because of the diminished potential for disturbance caused by construction. Sites which have buildings on them subsequently raise issues of demolition, compensation, or expropriation to obtain the land. Open spaces, whether public or private, contain the fewest obstructions to site development.

In initially selecting the sites to be evaluated as potential Storage/High Rate Treatment locations, aerial photographs were analyzed to locate the areas of open space which would be suitable for development. From the photos, areas were chosen that were measured to be large enough for at least one 20m x 50m basin and were in the downstream ends of catchment areas. The photographs show the relationships between roads, buildings, and vegetation and helped to determine if certain sites should be evaluated further.

2.2 DISTRIBUTION

For as many combined sewer districts as possible, sites were identified and investigated as potential locations for Storage/High Rate Treatment facilities. Identified sites are listed in **Table 2-1**; CS district boundaries are shown in **Figure 2-1**; and potential site locations are indicated on **Figures 2-2 and 2-3**.

In some districts, several sites were studied where open space was available. Catchment areas without available sites in them might therefore share one in a neighbouring catchment area. Site suitability can only be ascertained through the detailed analysis of site attributes gained from the inventory and assessment. This assessment will be followed-up by a visit by City operations staff and a senior consultant representative.

3. SITE INVENTORY AND ASSESSMENT

The suitability of each site was assessed in terms of how much the site would be altered during the construction process, whether surrounding environs would be affected (and to what degree), and how human use on, or around these sites would be affected. Attributes were recorded using symbols on a matrix to allow an effective comparison of characteristics between all sites.

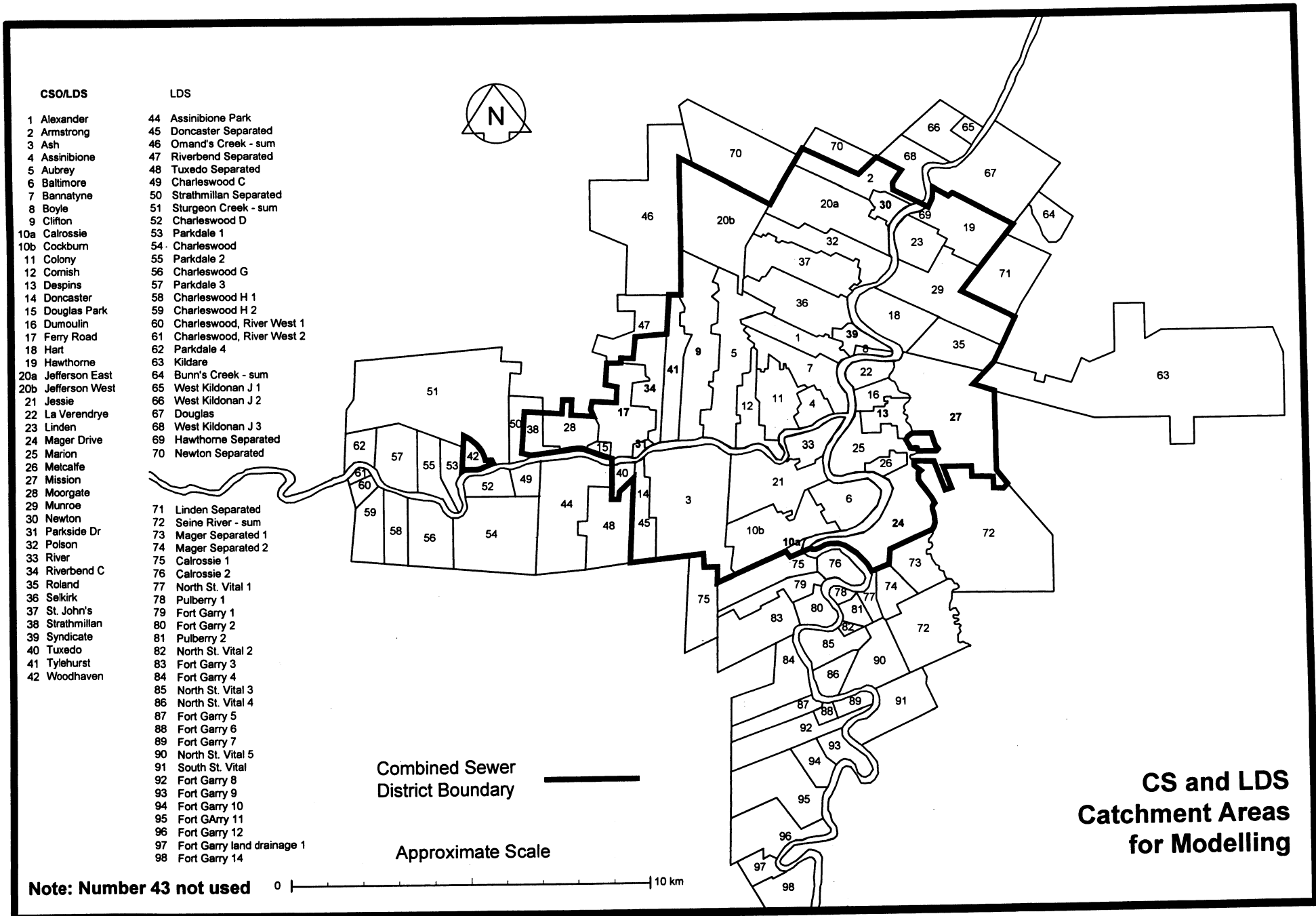
The results of the assessment are given on **Table 3-1**. Details of the site review have been entered into a database. The information is also provided in **Appendix B**.

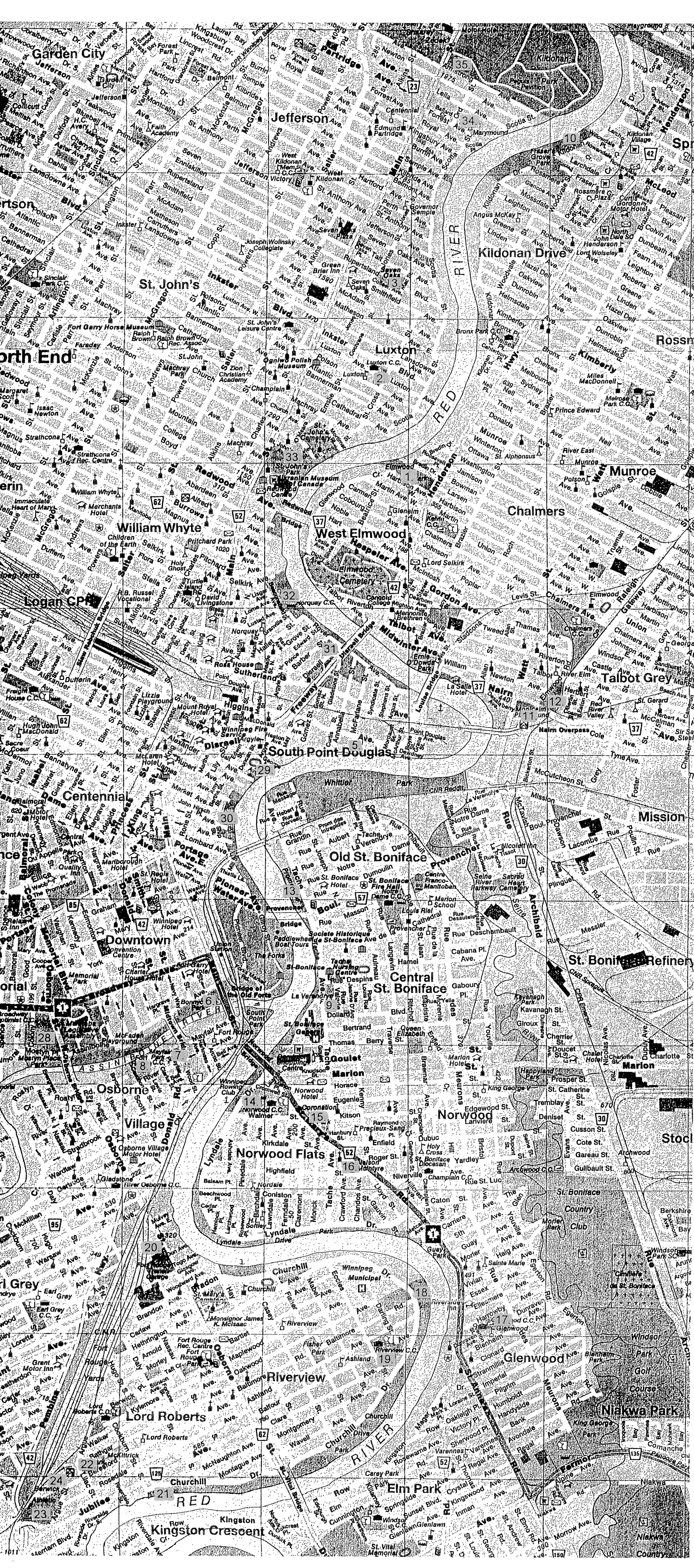
3.1 SITE PHYSICAL ATTRIBUTES CRITERIA

The natural characteristics of a site are important to the health of an urban region because they can provide a setting for habitat to flourish within the city. For development, certain physical attributes of any site can prove to be problematic and expensive for building. Land

TABLE 2-1

#	Site Name	Site Address	Catchment Area	Current Zoning
1.	Elmwood Park	380 Henderson Hwy.	Hart (18); Munroe (29)	PR1
2.	Luxton School	111 Polson Ave.	Polson (32)	PR1
3.	Seven Oaks Historic Site	Rupertsland Ave. E.	Jefferson East (20a)	PR1, R1-4
4.	Aubrey Park	139 Aubrey St.	Aubrey (5)	R2
5.	Higgins @ McFarlane	52 Higgins Ave.	Boyle (8)	M2
6.	Bonnycastle Park	Assiniboine Ave.	Assiniboine (4)	S1, BR8, Ra, NRf, P/L2, RB
7.	Mayfair Park	River @ Donald	River (33)	RM4
8.	Fort Rouge Park	River Ave.	River (33)	RM4
9.	La Verendrye Park	Tache Ave.	Durmoulin (16); Despins (13)	PR1
10.	Fraser's Grove Park	Kildonan Drive	Hawthorne (19); Linden (23)	PR1
11.	Montcalm Playground	Nairn Ave.	Mission (27)	PR1, C2
12.	Chalmers South Playground	Elmwood Drive	Roland (35)	PR1
13.	N. Promenade	733 Tache Ave.	La Verendrye (22)	PR1
14.	Norwood Community Centre	Lawndale Ave.	Marion (25)	PR1
15.	Coronation Park	41 St. Mary's Road	Metcalfe (26)	PR1
16.	Nelson McIntyre Collegiate	188 St. Mary's Road	Metcalfe (26)	R1-5
17.	Glenwood School	51 Blenheim Ave.	Mager Drive (24)	PR1
18.	Churchill Drive Park E.	Churchill Drive	Baltimore (6)	PR1
19.	Riverview Community Club	Ashland @ Eccles	Baltimore (6)	PR1
20.	N. of Transit Garage	421 Osborne St.	Jessie (21)	C2
21.	Churchill Drive Park W.	Churchill Drive	Calrossie/Cockburn (10)	PR1
22.	McKittrick Park	Beresford Ave.	Calrossie/Cockburn (10)	PR1
23.	Berwick Athletic Field	Argue St.	Calrossie/Cockburn (10)	M2
24.	CNR Fort Rouge Yards (south)	Argue St.	Calrossie/Cockburn (10)	M2
25.	Hebrew College Constr'n Site	Wellington Cres.	Tuxedo (40); Doncaster (14)	A5
26.	Bourkevale Community Centre	100 Ferry Road	Douglas Park (15); Ferry Road (17); Riverbend C (34)	PR1
27.	Omand Park	Portage @ Empress	Clifton (9); Tylehurst (41)	R2
28.	Great West Life parking lot	Balmoral @ Mostyn	Colony (11); Cornish (12)	Rc, NRb, BR1, P/L1, S2, LB
29.	George @ Argyle St.	George @ Argyle	Alexander (1); Bannatyne (7)	M1
30.	Juba Park	James Ave. E.	Alexander (1); Bannatyne (7)	S1, BR8, Ra, NRf, P/L2, RB
31.	Barber Park	Barber @ Rover Ave.	Syndicate (39)	PR1
32.	Norquay Community Centre	65 Granville St.	Selkirk (36)	PR1/R2
33.	St. John's Park	1199 Main St.	St. John's (37)	PR1
34.	Marymound School	442 Scotia Ave.	Newton (30)	R1-4
35.	Kildonan Park SW	2021 Main St.	Armstrong (2)	PR2





#	Site Name
1.	Elmwood Park
2.	Luxton School
3.	Seven Oaks Historic Site
4.	Aubrey Park
5.	Higgins @ McFarlane
6.	Bonnycastle Park
7.	Mayfair Park
8.	Fort Rouge Park
9.	La Verendrye Park
10.	Fraser's Grove Park
11.	Montcalm Playground
12.	Chalmers South Playground
13.	N. Promenade
14.	Norwood Community Centre
15.	Coronation Park
16.	Nelson McIntyre Collegiate
17.	Glenwood School
18.	Churchill Drive Park E.
19.	Riverview Community Club
20.	N. of Transit Garage
21.	Churchill Drive Park W.
22.	McKittrick Park
23.	Berwick Athletic Field
24.	CNR Fort Rouge Yards (south)
25.	Hebrew College Constr'n Site
26.	Bourkevale Community Centre
27.	Omand Park
28.	Great West Life parking lot
29.	George @ Argyle St.
30.	Juba Park
31.	Barber Park
32.	Norquay Community Centre
33.	St. John's Park
34.	Marymount School
35.	Kildonan Park SW

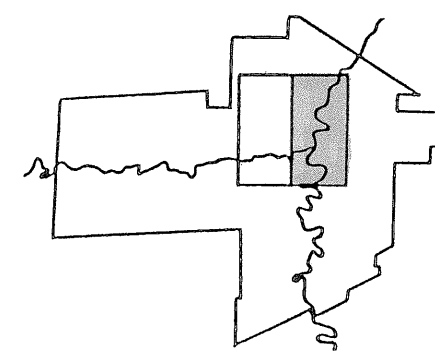


FIGURE 2-2



#	Site Name
1.	Elmwood Park
2.	Luxton School
3.	Seven Oaks Historic Site
4.	Aubrey Park
5.	Higgins @ McFarlane
6.	Bonnycastle Park
7.	Mayfair Park
8.	Fort Rouge Park
9.	La Verendrye Park
10.	Fraser's Grove Park
11.	Montcalm Playground
12.	Chalmers South Playground
13.	N. Promenade
14.	Norwood Community Centre
15.	Coronation Park
16.	Nelson McIntyre Collegiate
17.	Glenwood School
18.	Churchill Drive Park E.
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25.	Hebrew College Constr'n Site
26.	Bourkevale Community Centre
27.	Omand Park
28.	Great West Life parking lot
29.	George @ Argyle St.
30.	Juba Park
31.	Barber Park
32.	Norquay Community Centre
33.	St. John's Park
34.	Marymount School
35.	Kildonan Park SW

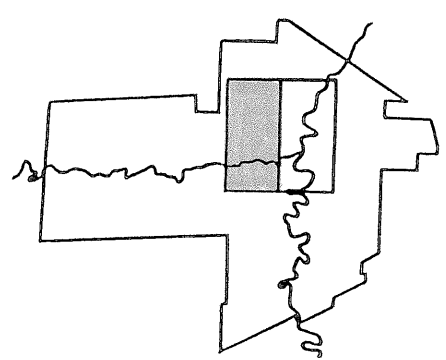


FIGURE 2-3

parcels with many structures, trees and poor slopes may be less suited to development and construction than others with less graded, open areas.

There are three basic physical attributes which determine the suitability of a site for CSO Storage/High Rate Treatment development.

- Vegetative Cover
- Surface Morphological Variance
- Presence of Structures

Each attribute, when evaluated, provides a unique set of implications for site development. Characteristics must be viewed in conjunction with other attributes to get an accurate depiction of site opportunities and constraints in determining its developability.

3.1.1 Vegetative Cover

Vegetation is important to a site because it enhances the appearance, as well as providing habitat for species diversity in urban areas. In Prairie cities, trees are a valued commodity and are not easily removed without some assurance of replacement. City parks are occasionally enhanced by detailed planting to create a sense of place and identity. As a result of the desire for urban greenspace, landscaped areas in the City of Winnipeg provide public access to riverfronts (such as the Forks, St. Vital Park, Kildonan Park, etc.), urban ecological reserves (Ft. Whyte Centre) and recreational sites (Assiniboine Park). The enhanced surroundings are often expensive to maintain and difficult to restore when damaged.

Development on a site requires that the land surface be cleared of any vegetation which might interfere with the construction of a structure. A Storage/High Rate Treatment basin requires that 20m x 50m of clear, open space be available to construct the facilities for CSO treatment. If it is decided that vegetation will be removed for construction, it must be determined how much will be removed, from where on the site, and what types will have to be replaced.

Mature, old-growth trees are usually the most valued vegetative commodity because of the canopy and length of time needed to grow. Some old-growth trees are as old as 80 years and reach heights in excess of 10 metres. In clusters, these form dense canopies which provide a habitat for wildlife within the urban setting. The number of trees to be removed is an important consideration in the cost of mitigation since moving and replacing trees is an expensive procedure. In some cases, very old trees are irreplaceable because they are nearing the end of their life span.

Shrubs, like tree canopies, are an important kind of ground cover for habitat when allowed to flourish. Bushes add to the diversity of a site with the different foliage types, and at times serve as visual barriers for residential areas or traffic corridors beyond. They may take less time to develop than some types of trees, but can be expensive to replace.

For the purposes of site inventory, vegetative cover is categorized (on **Table 3-1**) as the following:

- 50-100% of the developable surface is covered by mature tree growth, shrubs, or both;
- ⊗ 0-50% of the developable surface is covered by mature tree growth, shrubs, or both;
- minimal vegetative cover is present or needs to be removed from the site to prepare the site for construction.

3.1.2 Surface Morphological Variance

Surface morphology looks at the topography of the site and the subsequent surface water ponding at the location. Though surface water basins may not be deemed serious deterrents to construction, they sometimes serve as necessary collection ponds for site drainage.

High topographical variance is an important consideration because construction costs might increase where berms must be excavated to allow for basin installation. Some sites along the riverbank are problematic due to the potential problem of shoreline slumping, and the steep

**TABLE 3-1
CSO STORAGE/HIGH RATE TREATMENT SITE EVALUATION MATRIX**

SITE#	SITE NAME & CATCHMENT AREA #	OWNERSHIP ○ PUBLIC ● PRIVATE	LAND AVAILABILITY FOR RTBs	SITE PHYSICAL ATTRIBUTES			NEIGHBOURHOOD CONSIDERATIONS	
				VEGETATION COVER	SURFACE MORPHOLOGY VARIANCE	PRESENCE OF STRUCTURES	ON-SITE CONSTRUCTION DISRUPTION/DISPLACEMENT	OFF-SITE CONSTRUCTION DISTURBANCE
1	Elmwood Park (18) (29)	○	⊗	⊗ ³	⊗	○	⊗	⊗
2	Luxton School (32)	○	⊗	○	○	⊗	●	●
3	Seven Oaks Historic Site (20a)	○	⊗	○	○	⊗	⊗	●
4	Aubrey Park (5)	○	○	⊗ ³	○	⊗	●	●
5	#52 Higgins @ McFarlane (8)	●	●	○	○	○	○	○
6	Bonnycastle Park (4)	○	○	⊗ ³	⊗	○	⊗	⊗
7	Mayfair Park (33)	○	○	⊗ ²	○	⊗	●	⊗
8	Fort Rouge Park (33)	○	○	●	○	○	●	⊗
9	La Verendrye Park (16) (13)	○	●	○	○	⊗	⊗	⊗
10	Fraser's Grove Park (19) (23)	○	○	⊗ ³	⊗	○	⊗	⊗
11	Montcalm Playground (27)	○	●	⊗ ¹	○	○	⊗	○
12	Chalmers South Playground (35)	○	●	⊗ ²	○	○	⊗	⊗
13	N. Promenade (22)	○	●	○	○	○	○	⊗
14	Norwood Community Centre (25)	○	●	○	○	⊗	●	⊗
15	Coronation Park (26)	○	●	○	○	⊗	⊗	⊗
16	Nelson McIntyre Collegiate (26)	○	●	○	○	○	●	●
17	Glenwood School (24)	○	●	○	○	⊗	●	●
18	Churchill Drive Park E. (6)	○	⊗	⊗	⊗	○	⊗	⊗
19	Riverview Community Club (6)	○	●	○	○	○	●	●
20	N. of Transit Garage (21)	○	●	○	○	○	○	○
21	Churchill Drive Park W. (10)	○	○	●	●	○	⊗	⊗
22	McKittrick Park (10)	○	●	⊗ ³	○	⊗	●	●

SITE#	SITE NAME & CATCHMENT AREA #	OWNERSHIP ○ PUBLIC ● PRIVATE	LAND AVAILABILITY FOR RTBs	SITE PHYSICAL ATTRIBUTES			NEIGHBOURHOOD CONSIDERATIONS	
				VEGETATION COVER	SURFACE MORPHOLOGY VARIANCE	PRESENCE OF STRUCTURES	ON-SITE CONSTRUCTION DISRUPTION/DISPLACEMENT	OFF-SITE CONSTRUCTION DISTURBANCE
23	Berwick Athletic Field (10)	○	●	○	○	○	●	○
24	CNR Fort Rouge Yards (south) (10)	●	●	○	○	○	○	○
25	Hebrew College Construction Site (40) (14)	●	⊗	⊗ ³	○	○	⊗	⊗
26	Bourkevale Community Centre (15) (17) (34)	○	●	○	○	○	●	⊗
27	Omand Park (9) (41)	○	●	○	⊗	○	⊗	○
28	Great West Life parking lot (11) (12)	●	○	⊗ ²	○	⊗	⊗	⊗
29	George @ Argyle St. (1) (7)	○	⊗	⊗ ¹	●	○	○	○
30	Juba Park (1) (7)	○	⊗	⊗ ³	⊗	○	⊗	⊗
31	Barber Park (39)	○	●	○	○	⊗	●	⊗
32	Norquay Community centre (36)	○	○	⊗ ¹	○	○	●	●
33	St. John's Park (37)	○	⊗	⊗ ³	○	○	⊗	⊗
34	Marymount School (30)	●	●	○	○	○	⊗	●
35	Kildonan Park SW (2)	○	●	○	○	○	⊗	●

KEY:

○	Low (few/none)	¹	mature trees
⊗	Medium (moderate)	²	young trees/shrubs
●	High (most/entirely)	³	both

The presence of site structures is evaluated for the area of land where construction is most likely to occur and is categorized as the following (Table 3-1):

grade sloping toward the river. Facilities built on these sites would need additional reinforcement for stability to ensure protection from erosion and slumping.

Surface morphological variance has been categorized (on Table 3-1) according to the degree of slope and stability where:

- a steep slope exists (riverbank) in excess of 15 degrees and the soil stability might be deemed insufficient for the construction of a Storage/High Rate Treatment facility;
- ⊗ berms, or moderate sloping exists on the site with the possibility of surface water ponding on some areas of the site;
- o no slope exists and the site is basically flat.

3.1.3 Presence of Structures

Structures are classified as any built objects which exist on the site where development might occur. They are human-made and placed buildings/objects which might interfere with the construction of Storage/High Rate Treatment facilities because of either their permanence, size, or function. Structures are an important factor where private lands are being considered because of the additional assessed value that buildings can have dependent upon their condition, size and function.

Permanent structures include the following: houses, apartments, stores, garages, maintenance sheds, change houses, school buildings, factories, monuments and other structures of a fixed nature built on a foundation. Some permanent structures are small enough in size to be transported to another location during construction, but would need a replacement foundation when moving the object back onto the site.

Three important neighbourhood considerations should therefore be noted in determining the suitability of a site for CSO Storage/High Rate Treatment development.

- On-site function disruptions/displacement due to construction.
- Off-site neighbourhood disturbance due to construction.
- Long-term safety considerations.

These considerations enter into the evaluation of the site and surrounding neighbourhood environs in terms of time and context. Short-term considerations address potential construction disturbance on and off the site, and long-term, involves the safe operation and use of the constructed facility.

3.2.1 On-Site Function Disruptions/Displacement

Large open spaces in the centre of the city may be used for a variety of different functions. Some uses such as recreation involve more intensive activities, while other uses see little activity at all. The construction of CSO Storage/High Rate Treatment facilities will take place over several months and may interfere with some of the more intensive activities which routinely occur on certain sites. The level of disruption or disturbance is dependent upon the types of activities. With some recreational sites, there may a seasonal displacement from the location until construction is completed. Industrial grounds or empty sites are less likely to be affected by construction.

Disrupted or displaced locations include school/public playgrounds, baseball/football fields, race tracks, picnic areas, park paths, greenspace, automobile parking lots and public ceremonial spaces. Disruptions or displacement of site functions are categorized (Table 3-1) according to one of the following:

- Existing activities on the site will be displaced by the construction and will not be able to continue on the site while Storage/High Rate Treatment facilities are being built;

- ⊗ Existing activities on the site will be disrupted by the construction in the immediate vicinity, and some safety precautions may be needed;
- There is no significant activity which will experience any disturbance if construction is introduced onto the site.

3.2.2 Off-Site Neighbourhood Disturbance

Lands adjacent to a construction site may be susceptible to a high level of disturbance due to construction-related activities. Prolonged noise and neighbourhood safety are two effects of construction which affect various neighbouring land uses. Residential lands are an agglomeration of private domains which are loci for personal possessions, family activities, and individual sanctity. Construction noise can be considered a violation of this function if it is continued over an extended period of time. Residential areas also have a higher number of children using the street thereby creating a higher risk of accidents involving construction vehicles. Sites which require construction vehicle movement through large corridors of residential areas generate problems of noise and safety to local residents.

Noise and safety are less likely to be major problems in commercial areas or to adjacent recreational facilities, though minor inconveniences might result. The areas least likely to be disturbed by nearby construction would be industrial or manufacturing locales due to the existing presence of heavy machinery and production equipment.

The level of disturbance to the surrounding neighbourhood environs is dependent upon the surrounding land use function and how much additional traffic might be generated through the area as a result of the assembling the basin. The level of disturbance can therefore be classified as the following for evaluative purposes:

- A high level of disturbance, so as to imply opposition and potential interference to the completion of the project;
- ⊗ Moderate disturbance, which can be tolerated and will not jeopardize the project;

- o Minimal disturbance, where the land use area will not be affected by either noise or safety concerns created by the construction of the facility.

3.2.3 Long-Term Safety Considerations

Construction of treatment facilities in residential, commercial or recreational areas may raise some concerns of safety. Safety hazards, whether perceived or real, can result in public concern about the safety of the facilities in the neighbourhood. Treatment facilities may require that chlorine (likely in solution) be added to the wastewater for disinfection before it is discharged into the river system. As a result, the movement of chemicals to the treatment facility will require care and attention to ensure its proper handling.

Perceived hazards should not be underestimated - primarily the odour of sewage permeating through a residential area. Much the same as off-site neighbourhood disturbance during construction, long-term safety is directly influenced by the surrounding land functions in the immediate vicinity. Because the treatment basins may release an odour of sewage waste into the air, there is the possibility of irritation to nearby residents. Subsequently, the level of irritation varies with the intensity of the land function (residential, commercial, recreational, industrial) and is comparable to the evaluation criteria of the off-site neighbourhood disturbance during the construction period.

3.3 MULTI-TANK FACILITIES IN UNRESTRICTED SITE SPACE

Certain sites may be deemed inappropriate for development of CSO Storage/High Rate Treatment technology because of either the physical attributes or the neighbourhood considerations. As a result, other options for addressing the CSO problem will need to be examined for these catchment areas or the waste will have to be transferred to the nearest Storage/High Rate Treatment facility in a neighbouring catchment area. Depending on the volumes being transferred, it may be necessary for this neighbouring facility to accommodate a higher quota of waste than one tank is capable of receiving.

Each site is measured to determine if it is large enough for additional 20m x 50m basins and how they might be positioned on the site so as to maximize the open space which is available. In locations where the space allows for additional tanks to be constructed without difficulty, the maximum potential number are estimated, even if there is no intention of constructing that number on the site. This enables later decisions to be made that determine if other control options will be utilized in certain catchment areas, or if waste should be transferred to a neighbouring treatment facility.

3.4 LAND OWNERSHIP

Land ownership has the potential to dictate whether or not a Storage/High Rate Treatment facility will be constructed in a specified location. Though the majority of the sites being examined are lands which are publicly owned by the City of Winnipeg, some are lands which are under private ownership and require that a transfer of title occur before construction proceeds.

Lands which are privately owned and vacant are the least problematic because there is no additional value placed in any structures which may exist. Expropriation might be examined for these sites through a land purchase, the relinquishment of other City of Winnipeg lands in a different area for the piece of land which is needed, or a combination of both land and monetary exchange. If a land purchase is not an immediate requirement for building a treatment facility in that area, an amortization zone can be established to ensure public recovery of the lands at a future time of sale with the city specifying the terms of amortization and period for transfer of ownership.

Depending upon the receptivity of the private land owner to an agreement, land ownership can be perceived as either an opportunity or a constraint to treatment facility development and may be deemed a secondary site selection indicator until purchasing agreements are arranged with the owner.

3.5 EVALUATION PROCEDURE

Site evaluations were based upon four primary sources of collected information:

- Aerial photographs
 - interference in CSO catchment areas. The photographs were the initial mode of selection for the possible sites and used as a reference during analysis.
- Site Inventories/Neighbourhood Evaluations
 - Site and neighbourhood characteristics were observed and recorded from visits to each of the sites. Appendix B contains a detailed account of all collected site information. This information has been stored in a database.
- Locale Photographs
 - Important characteristics such as object locations, trees and structures were recorded on Compact Disk allowing for visual reference via computer.
- Site Maps
 - Approximations of object relationships on-site were recorded on site sketch maps to verify the aerial photograph information in greater plan detail and record what exists on the developable portions of the site. These sketch maps have been included in Appendix D.

Using the various sources of information collected from the inventory and assessment stage, attributes were compiled onto a matrix to allow for comparison between sites. The matrix contains each of the site names and lists the characteristics according to the stated evaluation criteria. The matrix does not attempt to prioritize the sites based upon the attributes, rather illustrates what features are prevalent and should be duly noted before construction is initiated.

The solid black circle (●) is generally an indication of high intensity (many, or most) for each of the categories; a crossed-out circle (⊗) is indicative of a medium or moderate ranking; and a white circle (○) refers to a low intensity (few, or none). Unless otherwise specified, these

constitute the generic ranking field, but should be checked against their more detailed descriptions in the evaluation criteria.

4. EVALUATION RESULTS

Though each site is an individual entity with its unique set of characteristics, similarities exist between attributes in various categories. For instance, some sites are best suited for development because they have the least amount of trees on the site, and yet others are more suited because they have very few residential units in the vicinity that can be disturbed. Each site cannot be removed from its context and can only be ranked against other sites if the same emphasis is placed on all variables. This emphasis is subjective and should therefore be determined in accordance with the community or designated representatives.

4.1 PHYSICAL ATTRIBUTES SUMMARY

4.1.1 Suitability Classification

The evaluation matrix (Table 3-1) illustrates the physical attributes which exist on the chosen sites in relation to one another. When combined, the physical attributes depict the suitability of the site for development of CSO Storage/High Rate Treatment facilities. The development suitability classification is based upon vegetative cover, surface morphological variance and presence of structures on the site. It consists of the following categories:

- A site is considered to be highly problematic for development if it displays one or more of the following attributes: 50-100% of the developable surface is covered by mature tree growth, shrubs, or both; a steep slope exists exceeding 15 degrees and the soil stability dictates that additional structural support will be necessary for the construction of a facility; or, large and permanent structures are present on the site.

- A site is somewhat problematic for developing treatment facilities on it when it has any one of the following attributes: 0-50% of the developable surface is covered by mature tree growth, shrubs, or both; berms, or moderate sloping exists on the site with the possibility that surface water will pool on some areas of the site; or, movable structures are present and therefore easy to temporarily re-locate during the construction period. It becomes a highly problematic site for development if two or more of these attributes are present together.
- A site is deemed developable and free of any formidable development obstacles when the following attributes exist: minimal vegetative cover needs to be removed to accommodate construction; no slope exists on the site; and, structures are not present on the site to interfere with construction of the treatment facilities.

4.1.2 Results

The sites classified as the most problematic for CSO Storage/High Rate Treatment development due to their physical attributes are the following:

#8	Fort Rouge Park	River (33),
#21	Churchill Drive Park W.	Calrossie/Cockburn (10),
#29	George @ Argyle	Alexander (1), Bannatyne (7).

The sites classified as developable for CSO Storage/High Rate Treatment facility construction due their physical attributes are the following:

#5	Higgins @ McFarlane	Boyle (8),
#13	N. Promenade	La Verendrye (22),
#16	Nelson McIntyre Collegiate	Metcalfe (26),
#19	Riverview Community Club	Baltimore (6),
#20	N. of Transit Garage	Jessie (21),
#23	Berwick Athletic Field	Calrossie/Cockburn (10),

#24	CNR Fort Rouge Yards (south)	Calrossie/Cockburn (10),
#26	Bourkevale Community Centre	Douglas Pk. (15), Ferry Rd. (17), Riverbend C (34),
#34	Marymound School	Newton (30),
#35	Kildonan Park SW	Armstrong (2).

The remaining sites are deemed developable with some restrictions as they relate to the generic classification categories. Details regarding the specific physical site attributes which may hinder development are found on [Table 3-1](#), or more specifically in [Appendix B](#).

4.2 NEIGHBOURHOOD CONSIDERATIONS SUMMARY

4.2.1 Suitability Classification

Neighbourhood considerations are illustrated on the evaluation matrix ([Table 3-1](#)) to compare the levels of human activity disturbance on and around these sites. Neighbourhood attributes are addressed in terms of both on-site and off-site disturbance over short and long time periods. On-site refers to the existing use of the site and how it will be temporarily or permanently altered to allow for the construction of the storage/treatment facility.

Off-site neighbourhood disturbance is based upon the current intensity level of human use on lands surrounding the sites and how these uses might be affected by heavy equipment noise or movement during the construction period. Long-term safety considerations are also influenced by the intensity level of human use on the sites. Both long-term safety and off-site neighbourhood disturbance are different issues, but are both concerned with the same critical factors (the danger or disruption of current human activity being disrupted, and the effects of construction or operation of the CSO storage/treatment facility on surrounding land uses). Subsequently, only one listing is provided on the matrix which is equally valid for both categories.

When combined, these attributes again depict the suitability of the site for development. A development suitability classification for neighbourhood considerations consists of two classifications - on-site function disruptions/displacement, and off-site neighbourhood disturbance. The classification criteria are as follows:

- A site is considered highly problematic if has both of the following: the existing activities on the site will be displaced by the construction and will not be able to continue on the site while Storage/High Rate Treatment facilities are being built; and, a high level of disturbance to surrounding environs will exist, so as to imply public opposition and potential interference to the completion of the project. If a site has only one of these attributes, it does not mean that a site would not be considered a possibility, but that an extensive public education effort would be a worthwhile opportunity expenditure to ensure the system is planned and installed with the knowledge and support of its surrounding neighbourhood.
- A site is considered to be somewhat problematic if it has one of the following attributes: there will likely be disruption of existing activities by the construction on the site or in the immediate vicinity, and some safety precautions may be needed; or, a moderate level of disturbance to surrounding environs will exist, which will be tolerated by the neighbouring users and will not likely jeopardize the project. It becomes a highly problematic site for development if two or more of these attributes are present together.
- A site is deemed developable when both of the following neighbourhood attributes exist: there is no significant activity which will experience any disturbance if construction manifests on the site; and, a minimal level of disturbance to surrounding environs will exist where any neighbouring land use area will not be affected by either noise or safety concerns created by the construction of the facility.

4.2.2 Results

Sites classified as the most problematic for CSO Storage/High Rate Treatment development due to their neighbourhood characteristics are the following:

#2	Luxton School	Polson (32),
#4	Aubrey Park	Aubrey (5),
#16	Nelson McIntyre Collegiate	Metcalfe (26),
#17	Glenwood School	Mager Drive (24),
#19	Riverview Community Club	Baltimore (6),
#22	McKittrick Park	Calrossie/Cockburn (10),
#32	Norquay Community Centre	Selkirk (36).

Sites classified as developable for CSO Storage/High Rate Treatment facility construction due their neighbourhood considerations are the following:

#5	Higgins @ McFarlane	Boyle (8),
#20	N. of Transit Garage	Jessie (21),
#24	CNR Fort Rouge Yards (south)	Calrossie/Cockburn (10),
#29	George @ Argyle St.	Alexander (1), Bannatyne (7).

All of the other remaining sites can be developed as long as considerations are made for the problematic attributes as defined through the generic classification categories. Details regarding the specific neighbourhood considerations which may hinder development can be referenced in **Appendix B** or on **Table 3-1**.

4.3 AVAILABILITY OF UNRESTRICTED SITE SPACE

Each of the sites examined has the surface capacity to house at least one Storage/High Rate Treatment Facility. Due to other site features present, not all of the sites would be developable without significant alterations. Based upon the amount of open space needed for constructing the basins (20m x 50m x 5m), nineteen sites would be able to accommodate at least two or more basins per site without many (or any) changes needed to existing site features. Eight others could accommodate at least one basin without significantly requiring changes to the

site, while the remaining eight would require significant alterations to allow construction of the one basin to occur.

4.4 CURRENT LAND OWNERSHIP IMPLICATIONS FOR POTENTIAL SITES

Most of the sites are public lands which belong to the City of Winnipeg and could likely accommodate Storage/High Rate Treatment technologies if the physical attributes and neighbourhood assessment indicated few problems in doing so. Five of the sites are under private ownership and the City does not have the power or jurisdiction for implementing the facilities on the site. To engage in construction, the following sites would need to have contact made with the owner regarding a transfer of title, compensation, or land sale (refer to Appendix C for ownership information).

- Higgins @ McFarlane
- CNR Fort Rouge Yards (south)
- Hebrew College Construction Site
- Great-West Life parking lot
- Marymound School

5. MITIGATION

The effects of construction could leave a site in a state where previous uses cannot be continued because of changes to the landscape. In areas where the land is heavily utilized for recreation or other functions which are deemed interactive with the surface, suitable mitigatory efforts would be incorporated to ensure a full restoration of this function. In several instances with the proposed City of Winnipeg CSO Storage/High Rate Treatment sites, structures such as playground equipment, baseball backstops, benches/bleachers, or racetrack facilities may be removed to make available the space for construction. Though many of these structures may be replaced on the site of the constructed facilities, objects such as trees, shrubs, berms

or fountains may be more costly and labour intensive to replace. A replanting, landscaping and natural features restoration initiative should nevertheless be executed as part of a site re-development scheme.

Of the locations which will be developed, mitigative costs are based on the level of alterations taking place during construction and noting via the pre-construction inventory assessment that indicates what presently exists on certain sites. Expenses involved in reconstructing human-made or natural features on a site will likely depend upon the net worth of the site prior to construction. For example, the cost of design and implementation of the Bonnycastle Park features in the late 1980's had an affixed price in excess of \$1.1 million. A large portion of this site would likely be disturbed by CSO facility construction and would face a relatively high mitigative cost if the complete restoration was attempted. A site such as Luxton School or McKittrick Park by comparison would have a very low cost, with merely the replacement of a few baseball backstops or the re-seeding of Kentucky blue-grass where necessary. Generally, sites with culminated "high" attributes on the Site Evaluation Matrix might be viewed as potentially more expensive in the types of mitigative measures that will be necessary. Appendix B provides details of the types of measures required on specific sites following construction.

The possibility exists that some of the sites being examined might not even be considered for sewer overflow management options. It is unlikely that each of the thirty-five sites will require the same level of remediative action. In conjunction with the differing attributes being affected on the sites, the amount of remediation will be influenced by the surface area of the storage/treatment basins. Increased volumes being sent from catchment areas which are unable to treat their own waste may significantly increase the number of storage/treatment basins required on a given site and subsequently, an increased area of land being built upon.

Mitigative measures should be viewed as an opportunity cost necessary to receiving public support for the project, as well as enhancing areas of greenspace in the city at the completion of on-site construction. The repercussions of restoring a site to its original condition (or better) will benefit the community and the environment over the long-term.

6. SUMMARY

The CSO Storage/High Rate Treatment Option will require an extensive amount of land for facility implementation, some of which may come from private ownership or the City of Winnipeg itself. Because the locale of most of these sites are near the centre of the city, there are not many which are derelict and unused. With the majority presently managed by the City of Winnipeg as public greenspace, there exists the problem of constructing CSO facilities on these sites without jeopardizing public access to these lands over the long-term and ensuring that they are not left in a state of disrepair. This inventory will be useful as a tool for site selection, or a guide for mitigative measures following construction.

In referencing sites using the inventory and assessment, it should be noted that sites should be viewed in conjunction with each other, and single attribute categories should not be sole determinants to legitimize site selection. Physical attributes for example, cannot be viewed apart from the neighbourhood considerations, availability of unrestricted site space, and land ownership. Each attribute category is important in the derivation of a holistic evaluation, even though site prioritization may ultimately be a somewhat subjective process dependent upon the precedence placed on certain attributes.



APPENDIX A



APPENDIX A

City of Winnipeg Zoning By-law 6400

"PR" Park and Recreational District

The intent and purpose of this District is for the conservation of areas of land in public ownership used for park and recreational purposes and to acknowledge and preserve areas of land in private ownership that is used for recreational purposes. (PR2 is for more generic and less restricted recreational uses than PR1).

"R1" One-Family District

This District is intended to provide areas for single-family homes and certain other specified uses such as churches or church halls, municipal buildings, schools, etc., usually associated with residential areas. Existing "C1" Limited Commercial District uses and buildings were deemed conforming and can continue in the same use or any other use permitted in that District. The minimum lot area is 5,500 square feet and the minimum lot width is 50 feet except in areas not served by a municipally-approved sewer system where the minimums are 11,000 square feet and 100 feet respectively. This produces a density of about 5 dwelling units per acre in areas served with municipal sewer and about 3 per acre in areas not so served.

"R1-4" Minimum Lot Width = 40 feet
 Minimum Lot Area = 4,000 square feet
 Approx. # of Dwelling Units per Acre = 6

"R1-5" Minimum Lot Width = 50 feet
 Minimum Lot Area = 5,000 square feet
 Approx. # of Dwelling Units per Acre = 5½

Public uses (including private schools) and religious institutions compatible with single-family residential uses are also allowed.

"R2" Two-Family District

This District is intended to provide areas for single and two-family uses and certain other specified uses such as schools, parks, churches, etc. usually associated with residential areas. The minimum site area required is 5,000 square feet and the minimum lot width 50 feet. The minimum site area per dwelling unit is 2,500 square feet. The resulting density varies from 5½ dwelling units per acre in areas developed solely with single-family dwellings to approximately 11 per acre in areas developed solely with duplexes.

"RM4" Multi-Family District

This zoning is intended for high density apartment buildings in areas located near the Central Business District or other major centres of commercial activity. A limited range of retail and personal service uses are permitted within the larger apartment building primarily to serve the occupants of these buildings.

Assuming an average of 1,000 square feet of building space per suite, the density of suites in this District can vary between 87 per acre with 30% usable open space to 142 per acre with 100% usable open space.

"C2" Commercial District

This District is intended to provide for general retail uses not permitted in "C1" Limited Commercial Districts and includes all of the commercial uses usually found in central shopping districts (amusement enterprises, hotels, automobile service stations, commercial clubs, medical and dental clinics, office, etc.). It also permits all of the "C1" uses and the "R3" Multiple-Family District uses at the same densities. There is no height limitation on buildings.

"M1" Light Industrial District

This District is intended to provide for light industrial uses which are carried on within a building or where any outside storage is enclosed by a wall or fence. This District will be used to ensure that industrial areas present an orderly appearance when seen from adjoining thoroughfares, highways and residential areas. All of the uses permitted in the "C2" District are also permitted including the residential uses. There is a height limitation of 45 feet. The lot area requirements for residential uses are the same as the "R3" District.

"M2" Light Industrial District

This is a general light industrial district and is intended to provide for very much the same uses as those in the "M1" District but enclosure within a building is not required. Other similar uses are permitted providing they are not obnoxious or offensive. No residential uses are permitted except living quarters for the use of watchmen and their families employed upon the premises of an industrial establishment. There is a height limitation of 85 feet.

"A5" Restricted Agricultural District

This allows small holdings of not less than five acres, upon which certain agricultural activities and restricted residential uses may be developed.

Note: Descriptions of the downtown zoning codes are based upon the City of Winnipeg Downtown Zoning By-law 4800 which describes the six categories in terms of land use, bulk stipulations, parking/loading specifications, signage, and urban design criteria.



APPENDIX B



SITEINV.DB

SITE # : 1
SITE NAME : Elmwood Park
LOCATION : 380 Henderson Hwy.
OWNERSHIP : City of Winnipeg
ZONING : PR1
FUNCTION : park land - passive recreation;
playground; swimming/wading
pool
STRUCTURES : changehouse at the east end
of site
VEGETATION : old growth pockets near river;
sparse across site centre;
dense at east end
SURFACE ATTRIBUTES : 3m high diagonal berm across
site (15-20 metres wide)
SURFACE WATER : concave across site centre -
surface pooling might occur
AREA OF OPEN SPACE : centre of site - largest open
space [about 30m x 60m clear
w/o trees]

SURROUNDING FUNCTIONS : RESIDENTIAL = on north,
south sides; COMMERCIAL =
east (7-eleven),etc.
POT CONST'N ROUTES : from Henderson Hwy. down
Harbison St. to Glenwood
Cres. (enter park at Glenwood)
SAFETY CONSIDERATIONS : PLAYGROUND
ONSITE/DIRECT DISRUPTION : the east side (playground) on
site may experience a
seasonal disruption due to
construction.
OFFSITE/INDIRECT DISR'N : surrounding areas are primarily
residential and may be
disrupted by construction noise
on-site or down Harbison St.
OTHER COMMENTS :

SITE # : 2
SITE NAME : Luxton School
LOCATION : 111 Polson Ave.
OWNERSHIP : City of Winnipeg
ZONING : PR1
FUNCTION : school (Nursury to Grade 8);
playground; community centre
STRUCTURES : school bldg; ball diamond
backstops; community centre
bldg; 2 outdoor skating rinks
VEGETATION : sparse - trees at the periphery
near roadside
SURFACE ATTRIBUTES : FLAT - very gradual slope
eastward
SURFACE WATER : N/A
AREA OF OPEN SPACE : east side of site - largest open
space [about 50m x 75m clear
of trees, rinks, or other
structures]

SURROUNDING FUNCTIONS : RESIDENTIAL = on all sides
POT CONST'N ROUTES : from Main St. down Polson
Ave. to St.Cross St. (enter off
of either Polson or St.Cross)
SAFETY CONSIDERATIONS : PLAYGROUND
ONSITE/DIRECT DISRUPTION : the east side (playground) on
site may experience a
seasonal disruption due to
construction.
OFFSITE/INDIRECT DISR'N : surrounding areas are primarily
residential and may be
disrupted by construction noise
on-site or down Polson Ave.
OTHER COMMENTS :

SITEINV.DB

SITE # : 3
SITE NAME : Seven Oaks House Museum
LOCATION : Rupertsland Ave. E.
OWNERSHIP : City of Winnipeg
ZONING : PR1
FUNCTION : historic park
STRUCTURES : old residence; machine shed; storage shed [each bldg is historic]
VEGETATION : sparse - trees at the periphery near sides of streets
SURFACE ATTRIBUTES : FLAT - very gradual slope eastward
SURFACE WATER : N/A
AREA OF OPEN SPACE : across west side of site - largest open space [about 30m x 90m clear of trees]

SURROUNDING FUNCTIONS : RESIDENTIAL = on all sides (derelict residential on west side)
POT CONST'N ROUTES : from Main St. down Smithfield Ave. to Mac St. (enter off of either Mac St. or Colleen Ave.)
SAFETY CONSIDERATIONS : PLAYGROUND, not on-site but nearby.
ONSITE/DIRECT DISRUPTION : construction could be a problem to visiting tourists during the summer if constr'n access is off of Colleen Ave.
OFFSITE/INDIRECT DISR'N : surrounding areas are primarily residential and may be disrupted by construction noise on-site or down neighbouring streets (incl. adjacent playground)
OTHER COMMENTS :

SITE # : 4
SITE NAME : Aubrey Park
LOCATION : 139 Aubrey St.
OWNERSHIP : City of Winnipeg
ZONING : R2
FUNCTION : park land - playground; transit loop
STRUCTURES : shed at SE corner of park; transit WC on east side of transit loop
VEGETATION : 4 mature trees in centre of play area; shrubs on south edge and NW corner of playground; trees at periphery along street
SURFACE ATTRIBUTES : FLAT - very gradual slope southward
SURFACE WATER : N/A

SURROUNDING FUNCTIONS : RESIDENTIAL
POT CONST'N ROUTES : from Portage Ave. down Aubrey St. (enter off of Aubrey St.)
SAFETY CONSIDERATIONS : PLAYGROUND
ONSITE/DIRECT DISRUPTION : the south side (playground) on site may experience a seasonal disruption due to construction.
OFFSITE/INDIRECT DISR'N : surrounding areas are primarily residential and may be disrupted by construction noise on-site or down Aubrey St.
OTHER COMMENTS :

SITEINV.DB

AREA OF OPEN SPACE : approx. only 30m across, with tree cluster in centre [about 30m x 100m TOTAL]

SITE # : 5
SITE NAME : Higgins @ McFarlane
LOCATION : 52 Higgins Ave.
OWNERSHIP : private
ZONING : M2
FUNCTION : undeveloped
STRUCTURES : N/A
VEGETATION : 2 mature trees in the SW corner of the site
SURFACE ATTRIBUTES : FLAT - gradual slope southward to Red River
SURFACE WATER : N/A
AREA OF OPEN SPACE : entire site is available [about 110m x 160m TOTAL]

SURROUNDING FUNCTIONS : LIGHT & HEAVY INDUSTRIAL
POT CONST'N ROUTES : Higgins Avenue.
SAFETY CONSIDERATIONS : High volume of heavy equipment down trucking route.
ONSITE/DIRECT DISRUPTION : N/A
OFFSITE/INDIRECT DISR'N : N/A
OTHER COMMENTS :

SITE # : 6
SITE NAME : Bonnycastle Park
LOCATION : Assiniboine Ave.
OWNERSHIP : City of Winnipeg
ZONING : 6 zones
FUNCTION : downtown riverfront park
STRUCTURES : park fountain on west edge
VEGETATION : many young tree clusters on-site (within last 10 years)
SURFACE ATTRIBUTES : berms shape pathways across the site
SURFACE WATER : N/A
AREA OF OPEN SPACE : centre of site - largest open space across berms [about 15m x 20m clear of trees/shrubs]

SURROUNDING FUNCTIONS : COMMERCIAL = on north side; RECREATIONAL = east, west sides
POT CONST'N ROUTES : from Main St. to Assiniboine Ave. (enter site off of Assinibine Ave.)
SAFETY CONSIDERATIONS : N/A
ONSITE/DIRECT DISRUPTION : a substantial degree of young growth vegetation will have to be removed
OFFSITE/INDIRECT DISR'N : downtown traffic flows may be disrupted along Assiniboine Ave./Fort St. by construction.
OTHER COMMENTS : manicured landscape (\$\$\$)

SITE # : 7
SITE NAME : Mayfair Park
LOCATION : River Ave. @ Donald St.

SURROUNDING FUNCTIONS : RESIDENTIAL = apartments on north side; TRAFFIC ROUTES = 2 major routes on south & east sides

SITEINV.DB

OWNERSHIP : City of Winnipeg
ZONING : RM4
FUNCTION : community skating rink;
squash courts
STRUCTURES : community centre building
VEGETATION : several mature trees on south
half of site (River Ave.)
SURFACE ATTRIBUTES : FLAT
SURFACE WATER : low area near southeast corner
AREA OF OPEN SPACE : across north side of site -
including the rink/courts [about
30m x 70m with some shrubs]

POT CONST'N ROUTES : River Ave. or Donald St.
SAFETY CONSIDERATIONS : N/A
ONSITE/DIRECT DISRUPTION : squash courts/skating facility
may experience a seasonal
disruption due to construction.
OFFSITE/INDIRECT DISR'N : surrounding residential around
Mayfair Place may be
disrupted by construction noise
on-site; traffic disruption may
occur at River & Donald.
OTHER COMMENTS :

SITE # : 8
SITE NAME : Ft. Rouge Park
LOCATION : River Ave.
OWNERSHIP : City of Winnipeg
ZONING : RM4
FUNCTION : park land - passive recreation;
playground; swimming/wading
pool
STRUCTURES : changehouse at the north end
of site; maintenance shed at
west edge of site
VEGETATION : abundant old growth trees and
shrub clusters across the
entire site
SURFACE ATTRIBUTES : gradual slope towards
Assiniboine River
SURFACE WATER : pooling may occur closer to
River Ave. where site has less
slope
AREA OF OPEN SPACE : negligible

SURROUNDING FUNCTIONS : RESIDENTIAL = apartments
on east, west, south sides
(across River Ave.)
POT CONST'N ROUTES : River Ave.
SAFETY CONSIDERATIONS : PLAYGROUND
ONSITE/DIRECT DISRUPTION : large number of old growth
trees have to be removed for
construction to occur; seasonal
disruption of site recreation
activities.
OFFSITE/INDIRECT DISR'N : surrounding residential may be
disrupted by construction noise
on-site.
OTHER COMMENTS :

SITE # : 9

SURROUNDING FUNCTIONS : RESIDENTIAL = on east,

SITEINV.DB

SITE NAME : La Verendrye Park
LOCATION : Tache Ave.
OWNERSHIP : City of Winnipeg
ZONING : PR1
FUNCTION : public greenspace
STRUCTURES : cenotaph/monument in centre of site (on east side)
VEGETATION : old growth trees at the periphery near sides of streets
SURFACE ATTRIBUTES : FLAT
SURFACE WATER : negligible slope - pooling may occur
AREA OF OPEN SPACE : across centre of site - largest open space [about 40m x 100m clear of trees]

POT CONST'N ROUTES : Tache Ave.
SAFETY CONSIDERATIONS : N/A
ONSITE/DIRECT DISRUPTION : more sub-surface space would be available with the temporary displacement of the monument during constr'n.
OFFSITE/INDIRECT DISR'N : surrounding areas are residential or have medical facilities and may be disrupted by on-site construction noise.
OTHER COMMENTS :

SITE # : 10
SITE NAME : Fraser's Grove Park
LOCATION : Kildonan Drive
OWNERSHIP : City of Winnipeg
ZONING : PR1
FUNCTION : park; picnic area
STRUCTURES : N/A
VEGETATION : 6-8 mature deciduous and coniferous trees in centre of site; 12 seedlings at north end
SURFACE ATTRIBUTES : steep grade from street down into park; gradual slope towards Red River
SURFACE WATER : N/A
AREA OF OPEN SPACE : approx. only 20-25m wide, with tree clusters [about 25m x 60m with trees]

SURROUNDING FUNCTIONS : RESIDENTIAL = across the street on east side, and bordering the site
POT CONST'N ROUTES : from Henderson Hwy. down Hawthorne to Kildonan Drive (enter site off of Kildonan Dr.)
SAFETY CONSIDERATIONS : N/A
ONSITE/DIRECT DISRUPTION : removal of some site foliage during construction would occur due to limited size of site
OFFSITE/INDIRECT DISR'N : surrounding areas are primarily residential and may be disrupted by construction noise on-site or down Kildonan Drive.
OTHER COMMENTS :

SITEINV.DB

SITE # : 11
SITE NAME : Montcalm Playground
LOCATION : Nairn Ave.
OWNERSHIP : City of Winnipeg
ZONING : PR1, C2
FUNCTION : playground; city fire hall behind
STRUCTURES : fire hall
VEGETATION : 5-6 mature deciduous trees in
the centre of site
SURFACE ATTRIBUTES : FLAT across site; steep incline
up side of Nairn Ave. overpass
SURFACE WATER : N/A
AREA OF OPEN SPACE : site width about 70m across
with the 5-6 trees

SURROUNDING FUNCTIONS : COMMERCIAL = light
industrial manufacturing on
south side; CPR Line bounds
east side
POT CONST'N ROUTES : Watt St. or Nairn Ave.
SAFETY CONSIDERATIONS : PLAYGROUND
ONSITE/DIRECT DISRUPTION : removal of 5 mature growth
trees
OFFSITE/INDIRECT DISR'N : N/A
OTHER COMMENTS :

SITE # : 12
SITE NAME : Chalmers S. Playground
LOCATION : Elmwood Dr.
OWNERSHIP : City of Winnipeg
ZONING : PR1
FUNCTION : playground
STRUCTURES : gazebo structure in centre of
site at playground
VEGETATION : young medium growth clusters
along south-west edge of site
SURFACE ATTRIBUTES : FLAT
SURFACE WATER : some poor drainage along the
west side of site
AREA OF OPEN SPACE : site is triangular with largest
open space at the south end
[about 60m x 80m with
vegetation]

SURROUNDING FUNCTIONS : RESIDENTIAL = on west side
opposite side of street; CPR
LAND = on east side of site;
TRAFFIC ROUTE = Nairn Ave.
on south
POT CONST'N ROUTES : from Watt St. down Talbot Ave.
to Elmwood Dr. (enter off of
Elmwood Dr.)
SAFETY CONSIDERATIONS : PLAYGROUND
ONSITE/DIRECT DISRUPTION : removal of trees at west edge
of site could be avoided if
construction area is defined at
southeast corner
OFFSITE/INDIRECT DISR'N : surrounding area to the west is
residential and may be
disrupted by construction noise
down Elmwood Dr.
OTHER COMMENTS :

SITEINV.DB

SITE # : 13
SITE NAME : N. Promenade
LOCATION : Tache Ave.
OWNERSHIP : City of Winnipeg
ZONING : PR1
FUNCTION : undeveloped on north end;
landscaped park at south end
of site

STRUCTURES : derelict building on adjacent
site at north end of site; City of
Winnipeg maintenace building
on the south-west corner of
site

VEGETATION : riverbank foliage on west edge
of site

SURFACE ATTRIBUTES : FLAT - very gradual slope
westward to Red River

SURFACE WATER : N/A

AREA OF OPEN SPACE : entire site is available, except
at west edge near riverbank
[about 60m x 120m]

SURROUNDING FUNCTIONS : RESIDENTIAL &
COMMERCIAL = on opposite
side of street (east side);
RECREATIONAL =
landscaped park on south side
of site

POT CONST'N ROUTES : Tache Ave.

SAFETY CONSIDERATIONS : N/A

ONSITE/DIRECT DISRUPTION : hydro poles and a single hydro
line crosses over the site;
south side park may
experience a seasonal
disruption due to construction.

OFFSITE/INDIRECT DISR'N : surrounding area to the east is
residential/commercial and
may be disrupted by
construction noise down Tache
Ave.

OTHER COMMENTS :

SITE # : 14
SITE NAME : Norwood Community Centre
LOCATION : NW Walmer St. & Lawndale
Ave.
OWNERSHIP : City of Winnipeg
ZONING : PR1
FUNCTION : community ball diamonds;
football field; swimming/wading
pool; community centre

STRUCTURES : changehouse on north side of
pool; community centre on
east side of site

VEGETATION : trees along Lyndale Dr.

SURFACE ATTRIBUTES : FLAT - steep slope up
embankment to Lyndale Dr.
from playing field

SURFACE WATER : N/A

SURROUNDING FUNCTIONS : RESIDENTIAL = on north,
south sides

POT CONST'N ROUTES : from St. Mary's Road down
Walmer St. (enter off of
Walmer St.)

SAFETY CONSIDERATIONS : PLAY & RECREATIONAL
SPACE in residential
neighbourhood.

ONSITE/DIRECT DISRUPTION : the playing fields/pool area on
site may experience a
seasonal disruption due to
construction.

OFFSITE/INDIRECT DISR'N : surrounding areas are primarily
residential and may be
disrupted by construction noise
on-site.

OTHER COMMENTS :

SITEINV.DB

AREA OF OPEN SPACE : across south and west sides of site

SITE # : 15
SITE NAME : Coronation Park
LOCATION : 41 St. Mary's Road
OWNERSHIP : City of Winnipeg
ZONING : PR1
FUNCTION : public greenspace
STRUCTURES : cenotaph/monument in centre of site (on NE side in front of social services bldg.)

VEGETATION : abundant old growth trees at periphery near sides of streets, and across site (systematic planting)

SURFACE ATTRIBUTES : FLAT - gradual slope to the SW toward St. Mary's Rd.

SURFACE WATER : some pooling in south corner

AREA OF OPEN SPACE : centre of site - largest open space [about 60m x 90m unobstructed]

SURROUNDING FUNCTIONS : RESIDENTIAL = on north, east, southwest edge;
COMMERCIAL = north on Tache Ave.

POT CONST'N ROUTES : St. Mary's Road or Tache Ave.

SAFETY CONSIDERATIONS : N/A

ONSITE/DIRECT DISRUPTION : more sub-surface space would be available with the temporary displacement of monument during construction if necessary.

OFFSITE/INDIRECT DISR'N : surrounding areas are primarily residential and may be disrupted by construction noise on-site.

OTHER COMMENTS :

SITE # : 16
SITE NAME : Nelson McIntyre Collegiate
LOCATION : 188 St. Mary's Road
OWNERSHIP : City of Winnipeg
ZONING : R1-5
FUNCTION : school; playground

STRUCTURES : school bldg; ball diamond backstops; football uprights

VEGETATION : N/A

SURFACE ATTRIBUTES : FLAT

SURFACE WATER : N/A

AREA OF OPEN SPACE : entire site is available across entire playing field

SURROUNDING FUNCTIONS : RESIDENTIAL = on south, west sides; CHURCH = next to school bldg

POT CONST'N ROUTES : from St. Mary's Road to Highfield St. (enter off of Highfield St.)

SAFETY CONSIDERATIONS : PLAYGROUND

ONSITE/DIRECT DISRUPTION : the playing fields on site may experience a seasonal disruption due to construction.

OFFSITE/INDIRECT DISR'N : surrounding areas are primarily residential and may be disrupted by construction noise through the neighbourhood

OTHER COMMENTS :

SITEINV.DB

SITE # : 17
SITE NAME : Glenwood School
LOCATION : 51 Blenheim Ave.
OWNERSHIP : City of Winnipeg
ZONING : PR1
FUNCTION : school; playground; community centre
STRUCTURES : school bldg; ball diamond backstops; community centre bldg; outdoor skating rink; basketball court
VEGETATION : sparse - trees at the periphery near roadside
SURFACE ATTRIBUTES : FLAT
SURFACE WATER : N/A
AREA OF OPEN SPACE : east side of site has the largest open space

SURROUNDING FUNCTIONS : RESIDENTIAL = on all sides
POT CONST'N ROUTES : from St. Mary's Road down Harrowby Ave. to Rue Des Meurons (enter off of Des Meurons or Blenheim Ave.)
SAFETY CONSIDERATIONS : PLAYGROUND
ONSITE/DIRECT DISRUPTION : the east side (playground) on site may experience a seasonal disruption due to construction.
OFFSITE/INDIRECT DISR'N : surrounding areas are primarily residential and may be disrupted by construction noise through the neighbourhood.
OTHER COMMENTS :

SITE # : 18
SITE NAME : Churchill Drive Park E.
LOCATION : Churchill Drive
OWNERSHIP : City of Winnipeg
ZONING : PR1
FUNCTION : riverfront park
STRUCTURES : City of Winnipeg maintenance bldg at north end of site/park
VEGETATION : 4-6 deciduous trees across site; 4 trees along Churchill Dr.
SURFACE ATTRIBUTES : steep grade from street down into park; moderate slope towards Red River
SURFACE WATER : N/A

SURROUNDING FUNCTIONS : RESIDENTIAL = across street on west side
POT CONST'N ROUTES : from Osborne St. down Clare Ave. and Eccles St. to Churchill Drive
SAFETY CONSIDERATIONS : Long distance through residential area for construction vehicles to travel.
ONSITE/DIRECT DISRUPTION : removal of some existing semi-mature growth on site to accomodate construction.
OFFSITE/INDIRECT DISR'N : possible residential disruption due to extensive distance through residential area for construction vehicles to travel

SITEINV.DB

AREA OF OPEN SPACE : approx. only 25-30m wide, with occasional trees [about 30m x 70m with trees]

to get to the site

OTHER COMMENTS :

SITE # : 19
SITE NAME : Riverview Community Club
LOCATION : Ashland & Eccles
OWNERSHIP : City of Winnipeg
ZONING : PR1
FUNCTION : community centre; ball diamonds
STRUCTURES : ball diamond backstops; community centre bldg.
VEGETATION : sparse near southwest corner
SURFACE ATTRIBUTES : FLAT
SURFACE WATER : N/A
AREA OF OPEN SPACE : across south and west sides of site

SURROUNDING FUNCTIONS : RESIDENTIAL = on all sides
POT CONST'N ROUTES : from Osborne St. down Clare Ave. or Ashland Ave. to Eccles St. (enter off of Eccles St.)
SAFETY CONSIDERATIONS : PLAY & RECREATIONAL SPACE in residential neighbourhood.
ONSITE/DIRECT DISRUPTION : the south side of site (ball diamonds) may experience a seasonal disruption due to construction.
OFFSITE/INDIRECT DISR'N : possible residential disruption due to extensive distance through residential area for construction vehicles to travel to get to site.

OTHER COMMENTS :

SITE # : 20
SITE NAME : N. of Transit Garage
LOCATION : 421 Osborne St.
OWNERSHIP : City of Winnipeg
ZONING : C2
FUNCTION : undeveloped land adjacent to CNR Fort Rouge Yards
STRUCTURES : some piled concrete/debris at

SURROUNDING FUNCTIONS : RESIDENTIAL = apartments opposite on Osborne St; CNR Line = bounds on west; TRANSIT GARAGE = south side
POT CONST'N ROUTES : Osborne St.
SAFETY CONSIDERATIONS : N/A
ONSITE/DIRECT DISRUPTION : N/A

SITEINV.DB

VEGETATION : NW edge of site next to rail yards
 sparse - a tree cluster at the SW corner near the Transit Garage

SURFACE ATTRIBUTES : FLAT

SURFACE WATER : N/A

AREA OF OPEN SPACE : entire site is available

OFFSITE/INDIRECT DISR'N : N/A

OTHER COMMENTS :

SITE # : 21

SITE NAME : Churchill Drive Park W.

LOCATION : Churchill Drive

OWNERSHIP : City of Winnipeg

ZONING : PR1

FUNCTION : public greenspace

STRUCTURES : City of Winnipeg maintenance bldg at west end of site/park

VEGETATION : abundant old growth trees and shrub clusters across the entire site

SURFACE ATTRIBUTES : moderate-steep grade from Churchill Dr. towards Red River

SURFACE WATER : N/A

AREA OF OPEN SPACE : negligible

SURROUNDING FUNCTIONS : RESIDENTIAL = on north side opposite side of street

POT CONST'N ROUTES : from Jubilee Ave. down Cockburn St.S. or Daly St.S. to Churchill Dr.

SAFETY CONSIDERATIONS : N/A

ONSITE/DIRECT DISRUPTION : large number of old growth riverbank veg'n have to be removed for constr'n to occur.

OFFSITE/INDIRECT DISR'N : surrounding areas are primarily residential and may be disrupted by construction noise on-site

OTHER COMMENTS : site slope too steep

SITE # : 22

SITE NAME : McKittrick Park

LOCATION : Beresford Ave.

OWNERSHIP : City of Winnipeg

ZONING : PR1

FUNCTION : ball diamond; wading pool; playground

STRUCTURES : ball diamond backstop; maintenance building at west-centre of site

VEGETATION : abundant old growth trees and shrub clusters across the entire east side of site

SURROUNDING FUNCTIONS : RESIDENTIAL = on north, east, south sides; FIRE HALL = on west side

POT CONST'N ROUTES : from Jubilee Ave. down Lilac St.S. or Cockburn St.S.

SAFETY CONSIDERATIONS : PLAYGROUND

ONSITE/DIRECT DISRUPTION : the west side of site may experience a seasonal disruption due to construction.

OFFSITE/INDIRECT DISR'N : surrounding areas are primarily residential and may be disrupted by construction vehicles through the

SITEINV.DB

SURFACE ATTRIBUTES : FLAT
SURFACE WATER : pooling may occur in some low areas across the centre of the site
AREA OF OPEN SPACE : negligible across the east end of the site; across west end [about 60m x 60m clear of trees or other structures]

neighbourhood.

OTHER COMMENTS :

SITE # : 23
SITE NAME : Berwick Athletic Field
LOCATION : Argue St.
OWNERSHIP : City of Winnipeg
ZONING : M2
FUNCTION : community ball diamonds
STRUCTURES : ball diamond backstops
VEGETATION : shrubs at SE edge of site near Argue St.
SURFACE ATTRIBUTES : FLAT
SURFACE WATER : N/A
AREA OF OPEN SPACE : entire site is available

SURROUNDING FUNCTIONS : RESIDENTIAL = across the street on east side; CNR Line = on west side

POT CONST'N ROUTES : from Jubilee Ave. down Lilac St.S. and Rosedale Ave. to Argue St. (OR) construct more direct access from Jubilee Ave. to south edge of site.

SAFETY CONSIDERATIONS : Long distance through residential area for construction vehicles to travel.

ONSITE/DIRECT DISRUPTION : the playing fields on site may experience a seasonal disruption due to construction.

OFFSITE/INDIRECT DISR'N : surrounding areas are primarily residential and may be disrupted by construction vehicles through the neighbourhood.

OTHER COMMENTS :

SITE # : 24
SITE NAME : CNR Fort Rouge Yards (South)
LOCATION : Argue St.
OWNERSHIP : CNR

SURROUNDING FUNCTIONS : FIRE HALL = on east edge of site; CNR Line = on west side

POT CONST'N ROUTES : from Jubilee Ave. down Lilac St.S. and Beresford Ave. to Argue St. (OR) construct more direct access from Jubilee Ave.

SITEINV.DB

ZONING : M2
FUNCTION : undeveloped
STRUCTURES : N/A
VEGETATION : tree cluster along Argue St.
SURFACE ATTRIBUTES : FLAT
SURFACE WATER : N/A
AREA OF OPEN SPACE : entire site is available

SAFETY CONSIDERATIONS : to the south edge of site.
Long distance through residential area for construction vehicles to travel.
ONSITE/DIRECT DISRUPTION : N/A
OFFSITE/INDIRECT DISR'N : surrounding areas are primarily residential and may be disrupted by construction vehicles through the neighbourhood.

OTHER COMMENTS :

SITE # : 25
SITE NAME : Hebrew College Constr'n Site
LOCATION : Wellington Cr. & Doncaster St.
OWNERSHIP : Jewish Community Campus of Wpg
ZONING : A5
FUNCTION : landscaped greenspace
STRUCTURES : new college being constructed on southern boundary of available land
VEGETATION : several clusters of maturing spruce trees and shrubs along north edge of site bordering Wellington Cres.
SURFACE ATTRIBUTES : FLAT
SURFACE WATER : N/A
AREA OF OPEN SPACE : across north end of site [about 30m x 90m unobstructed]

SURROUNDING FUNCTIONS : RESIDENTIAL = on east, west sides
POT CONST'N ROUTES : from Keneston Blvd. down Tuxedo Ave. to Doncaster St.
SAFETY CONSIDERATIONS : N/A
ONSITE/DIRECT DISRUPTION : removal of the trees at the north end of the site may be necessary to accomodate construction.
OFFSITE/INDIRECT DISR'N : possible residential disruption due to extensive distance through residential area for construction vehicles to travel to get to site.
OTHER COMMENTS :

SITE # : 26

SURROUNDING FUNCTIONS : RESIDENTIAL = on east, west

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SITE NAME : Bourkevale Community Centre
LOCATION : 100 Ferry Rd.
OWNERSHIP : City of Winnipeg
ZONING : PR1
FUNCTION : community ball diamonds;
football field; swimming/wading
pool; community centre
STRUCTURES : ball diamond backstops;
community centre bldg;
outdoor skating rink; football
field
VEGETATION : riverbank foliage on south
edge of site; trees at periphery
near sides of streets
SURFACE ATTRIBUTES : FLAT - gradual slope to the
south toward Assiniboine River
SURFACE WATER : N/A
AREA OF OPEN SPACE : across centre of site - space
large enough for multi-facilities
[4 tanks]

POT CONST'N ROUTES : sides; SCHOOL = St. James
Collegiate on north side
from Portage Ave. down Ferry
Rd. (enter off of Ferry Rd.)
SAFETY CONSIDERATIONS : PLAYGROUND
ONSITE/DIRECT DISRUPTION : the playing fields which are
also schoolgrounds for St.
James Collegiate may
experience a seasonal
disruption due to construction.
OFFSITE/INDIRECT DISR'N : surrounding areas are primarily
residential and may be
disrupted by construction
vehicles through the
neighbourhood.
OTHER COMMENTS :

SITE # : 27
SITE NAME : Omand Park
LOCATION : Portage Ave. & Empress St.
OWNERSHIP : City of Winnipeg
ZONING : R2
FUNCTION : riverfront park; community ball
diamonds; football field
STRUCTURES : ball diamond backstops
VEGETATION : abundant old growth trees and
shrub clusters across the
entire west side of site
bordering CPR tracks
SURFACE ATTRIBUTES : moderate grade sloping down
NE to Omand's Creek and
down southward to Assiniboine
River
SURFACE WATER : Omand's Creek runs across
NE and east side of site
AREA OF OPEN SPACE : across south and west sides of
site - largest open space

SURROUNDING FUNCTIONS : CPR Line = bounds on west;
CHURCH = opposite creek on
NE side
POT CONST'N ROUTES : from Portage Ave. down
Empress St.E. across CPR
tracks (entering site on SW
corner)
SAFETY CONSIDERATIONS : Entering site from Empress St.
E. crossing active CPR Line
near bridge.
ONSITE/DIRECT DISRUPTION : the playing fields on site may
experience a seasonal
disruption due to construction.
OFFSITE/INDIRECT DISR'N : N/A
OTHER COMMENTS :

SITEINV.DB

[about 80m x 110m clear of trees or other structures]

SITE # : 28
SITE NAME : Great West Life parking lot
LOCATION : Balmoral St. & Mostyn Ave.
OWNERSHIP : Corporate Properties, Ltd.
ZONING : 6 zones
FUNCTION : parking lot for Great-West Life Assurance Co.
STRUCTURES : parking row partitions with electrical outlets
VEGETATION : east of parking lot - greenspace with old mature trees bordering Balmoral St.; hedge seperates lawn from parking area
SURFACE ATTRIBUTES : FLAT
SURFACE WATER : N/A (presently drained off parking lot site)
AREA OF OPEN SPACE : [about 75m x 210m on-site with parking fixtures and shrubs]

SURROUNDING FUNCTIONS : RESIDENTIAL = on SW side, opposite side of Balmoral St. and Broadway Ave.;
 COMMERCIAL = east side
POT CONST'N ROUTES : from Osborne St.N. down Mostyn Ave. (OR) from Broadway Ave. down Balmoral St.
SAFETY CONSIDERATIONS : Heavy traffic in downtown area.
ONSITE/DIRECT DISRUPTION : xxx # of parking stalls will be displaced during construction.
OFFSITE/INDIRECT DISR'N : downtown traffic flows may be disrupted along Mostyn Ave. /Balmoral St. by construction.
OTHER COMMENTS :

SITE # : 29
SITE NAME : George Ave. @ Argyle St.
LOCATION : George Ave. @ Argyle St.
OWNERSHIP : City of Winnipeg
ZONING : M1
FUNCTION : riverfront greenspace
STRUCTURES : N/A
VEGETATION : sparse - a few individual trees across the site
SURFACE ATTRIBUTES : moderate-steep grade towards Red River
SURFACE WATER : N/A
AREA OF OPEN SPACE : approx. 30-35m wide [about 35m x 115m with trees]

SURROUNDING FUNCTIONS : COMMERCIAL & INDUSTRIAL = west of site
POT CONST'N ROUTES : from Main St. down Pacific Ave. to riverfront road allowance
SAFETY CONSIDERATIONS : N/A
ONSITE/DIRECT DISRUPTION : removal of some existing trees on site to accomodate construction.
OFFSITE/INDIRECT DISR'N : N/A
OTHER COMMENTS : slope may be problematic

SITEINV.DB

SITE # : 30
SITE NAME : Juba Park
LOCATION : James Ave.E.
OWNERSHIP : City of Winnipeg
ZONING : 6 zones
FUNCTION : riverfront greenspace - passive recreation
STRUCTURES : N/A
VEGETATION : abundant old growth trees and shrub clusters on riverbank; intermittent vegetation across rest of site
SURFACE ATTRIBUTES : berms shape pathways across the site
SURFACE WATER : N/A
AREA OF OPEN SPACE : across west edge of site - largest open space [about 20m x 80m unobstructed]

SURROUNDING FUNCTIONS : COMMERCIAL & INDUSTRIAL = west of site
POT CONST'N ROUTES : from Main St. down Pacific Ave. to riverfront road allowance
SAFETY CONSIDERATIONS : N/A
ONSITE/DIRECT DISRUPTION : removal of some existing semi-mature growth on site to accomodate construction.
OFFSITE/INDIRECT DISR'N : N/A
OTHER COMMENTS : manicured landscape (\$\$\$)

SITE # : 31
SITE NAME : Barber Park
LOCATION : Barber St. & Rover Ave.
OWNERSHIP : City of Winnipeg
ZONING : PR1
FUNCTION : community ball diamonds; playground
STRUCTURES : ball diamond backstops
VEGETATION : sparse - trees at the periphery near roadside
SURFACE ATTRIBUTES : FLAT
SURFACE WATER : N/A
AREA OF OPEN SPACE : approx. 60m x 70m unobstructed

SURROUNDING FUNCTIONS : RESIDENTIAL = on west, south side
POT CONST'N ROUTES : from Disraeli Fwy. to Disraeli St./Rover Ave.
SAFETY CONSIDERATIONS : PLAYGROUND
ONSITE/DIRECT DISRUPTION : the SW side (playground) on site may experience a seasonal disruption due to construction.
OFFSITE/INDIRECT DISR'N : surrounding area to the south and west is primarily residential and may be disrupted by construction noise on-site.
OTHER COMMENTS :

SITE # : 32
SITE NAME : Norquay Community Centre

SURROUNDING FUNCTIONS : RESIDENTIAL = on west, south, east side

SITEINV.DB

LOCATION :	65 Granville St.	POT CONST'N ROUTES :	from Main St. down Euclid Ave. to Lusted Ave. (enter off of Beaconsfield Ave.)
OWNERSHIP :	City of Winnipeg		
ZONING :	PR1/R2	SAFETY CONSIDERATIONS :	PLAYGROUND & long distance through residential area for construction vehicles to travel.
FUNCTION :	park space; playground; swimming/wading pool; community centre	ONSITE/DIRECT DISRUPTION :	removal of some existing trees on site to accomodate construction & some recreation functions on site may experience a seasonal disruption due to construction.
STRUCTURES :	community centre bldg.; pool changehouse; outdoor rink	OFFSITE/INDIRECT DISR'N :	surrounding areas are primarily residential and may be disrupted by construction noise on-site or through the neighbourhood.
VEGETATION :	riverbank foliage on north edge of site; trees at periphery near streets; intermittent old growth trees across site	OTHER COMMENTS :	
SURFACE ATTRIBUTES :	FLAT - gradual slope north toward Red River		
SURFACE WATER :	N/A		
AREA OF OPEN SPACE :	approx. 30m x 130m across centre of site with some trees		

SITE # :	33	SURROUNDING FUNCTIONS :	RESIDENTIAL = on north side; COMMERCIAL (breweries) = south side
SITE NAME :	St. John's Park		
LOCATION :	1199 Main St.	POT CONST'N ROUTES :	from Main St. down St. John's Ave. (OR) access off of Main St. behind breweries along south edge of park
OWNERSHIP :	City of Winnipeg	SAFETY CONSIDERATIONS :	PLAYGROUND
ZONING :	PR1	ONSITE/DIRECT DISRUPTION :	removal of some existing trees on site to accomodate construction & some recreation functions on site may experience a seasonal disruption due to construction.
FUNCTION :	riverfront greenspace; ball diamond; playground; swimming/wading pool; lawn bowling	OFFSITE/INDIRECT DISR'N :	possible nearby residential disruption due to construction noise on-site.
STRUCTURES :	ball diamond backstops; changehouse; rain shelter gazebo; lawn bowling clubhouse	OTHER COMMENTS :	
VEGETATION :	abundant old growth trees and shrub clusters interspersed across the entire site		
SURFACE ATTRIBUTES :	FLAT across most of site sloping eastward toward Red River;		

SITEINV.DB

SURFACE WATER : drainage creek through NE corner of site sloping to river
AREA OF OPEN SPACE : area 1 - 20m x 65m unobstructed; area 2 - 45m x 50m unobstructed
SITE # : 34
SITE NAME : Marymount School
LOCATION : 442 Scotia St.
OWNERSHIP : private
ZONING : R1-4
FUNCTION : school
STRUCTURES : school bldg. east of open greenspace
VEGETATION : sparse - trees at the periphery near roadside
SURFACE ATTRIBUTES : FLAT
SURFACE WATER : N/A
AREA OF OPEN SPACE : across centre of site - largest open space [about 45m x 60m clear of trees, or other structures]

SURROUNDING FUNCTIONS : RESIDENTIAL = on north, west, south sides; SCHOOL = bldg. east side of site

POT CONST'N ROUTES : from Main St. down Forrest Ave. to Ord St. (enter off of either Forrest Ave. or Ord St.)

SAFETY CONSIDERATIONS : PLAYGROUND

ONSITE/DIRECT DISRUPTION : the west side (play space) on site may experience a seasonal disruption due to construction.

OFFSITE/INDIRECT DISR'N : surrounding areas are primarily residential and may be disrupted by construction noise on-site or through the neighbourhood.

OTHER COMMENTS :

SITE # : 35
SITE NAME : Kildonan Park SW
LOCATION : 2021 Main St.
OWNERSHIP : City of Winnipeg
ZONING : PR2
FUNCTION : general multi-purpose parkland
STRUCTURES : maintenance building at SE corner of site
VEGETATION : abundant old growth trees and shrub clusters around periphery of site
SURFACE ATTRIBUTES : FLAT
SURFACE WATER : N/A

SURROUNDING FUNCTIONS : RESIDENTIAL = on south side; RECREATIONAL = opposite park road on north, east, west sides - continuation of park

POT CONST'N ROUTES : from Main St. down Armstrong Ave. (OR) from Main St. through Kildonan Park

SAFETY CONSIDERATIONS : N/A

ONSITE/DIRECT DISRUPTION : N/A

OFFSITE/INDIRECT DISR'N : possible nearby residential disruption due to construction noise on-site.

OTHER COMMENTS :

AREA OF OPEN SPACE : across centre of site - largest
open space [about 65m x
170m clear of trees, or other
structures]



APPENDIX C



APPENDIX C

Private Ownership Sites

1) Higgins @ McFarlane

Joe's & Company (200 - 690 Joseph St.)

telephone: (204) 233-7770

facsimile: (204) 233-0811

2) Fort Rouge Yards (south)

Canadian National Railway (Real Estate Services - Edmonton)

Land Manager for Manitoba, telephone: (403) 421-6828

Real Estate Assistant for Mb. telephone: (403) 421-6030

3) Hebrew College Constr'n Site

Jewish Community Campus of Winnipeg (200 - 370 Hargrave St.)

telephone: (204) 943-0406

4) Great-West Life parking lot

Great-West Life c/o Corporate Services (Premises Office - 100 Osborne St. N.)

telephone: (204) 946-7319

facsimile: (204) 946-4191

5) Marymound School

Congregation of Our Lady of Charity of the Good Shepherd (442 Scotia Ave.)

Marymound Inc. Administration, telephone: (204) 338-7971



APPENDIX D

CSO: Site Inventory/Neighbourhood Evaluation

#510E3845

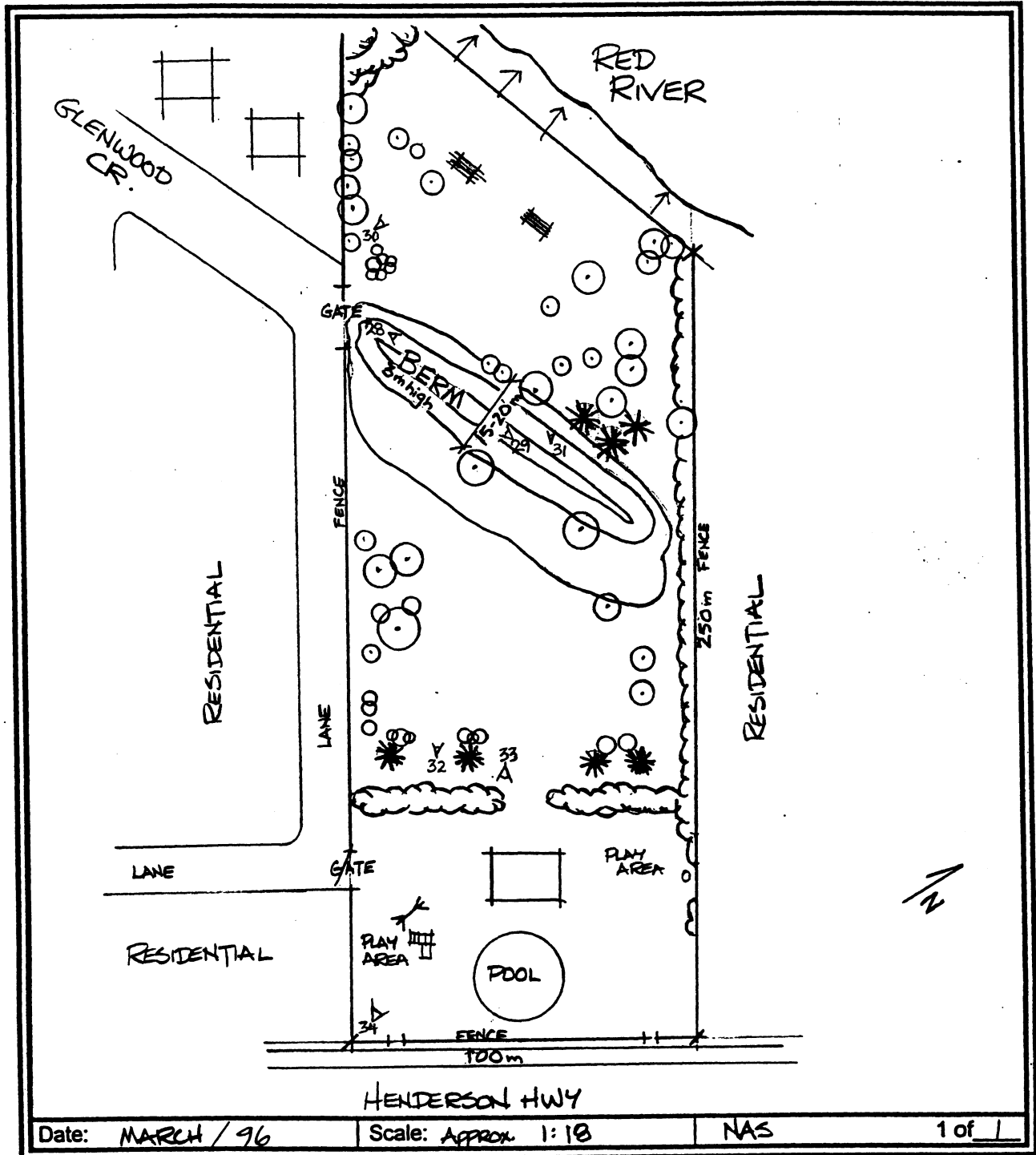
Site Numbers, Names & Catchment Areas:

			CD ROM Photographs:
#1	Elmwood Park (380 Henderson Hwy.)	Hart (18); Munroe (29)	CD#1 28, 29, 30, 31, 32, 33, 34
#2	Luxton School (210 St. Cross St.)	Polson (32)	35, 36, 37, 38, 39, 40, 41
#3	Seven Oaks Historic Site	Jefferson East (20a)	43, 44, 45, 46, 47, 48, 49, 50-5
#4	Aubrey Park (139 Aubrey St.)	Aubrey (5)	1, 2, 3, 4, 5
#5	#52 Higgins @ McFarlane	Boyle (8)	6, 7, 8, 9, 10
#6	Bonnycastle Park	Assiniboine (4)	11, 12, 13, 14, 15, 16
#7	Mayfair Park	River (33)	17, 18, 19, 20, 21, 22, 23
#8	Fort Rouge Park	River (33)	24, 25, 26
#9	La Verendrye Park	Durmoulin (16); Despins (13)	CD#2 67, 68, 69, 70, 71
#10	Fraser's Grove Park	Hawthorne (19); Linden (23)	52, 53, 54, 55, 56, 57
#11	Montcalm Playground (Nairn Ave.)	Mission (27)	61, 62, 64, 65, 66
#12	Chalmers South Playground (Elmwood St.)	Roland (35)	58, 59, 60, 63
#13	N. Promenade (#733 Tache St.)	La Verendrye (22)	77, 1
#14	Norwood Community Centre	Marion (25)	5, 6, 7, 8, 9
#15	Coronation Park (#41 St. Mary's Rd.)	Metcalfe (26)	72, 73, 74, 75, 76
#16	Nelson McIntyre (#188 St. Mary's Rd.)	Metcalfe (26)	2, 3, 4
#17	Glenwood School (#51 Blenheim Ave.)	Mager Drive (24)	10, 11, 12, 13
#18	Churchill Drive Park E.	Baltimore (6)	14, 15, 16
#19	Riverview Community Club	Baltimore (6)	26, 27
#20	N. of Transit Garage (#421 Osborne St.)	Jessie (21)	23, 24, 25
#21	Churchill Drive Park W.	Calrossie/Cockburn (10)	28, 29, 30
#22	McKittrick Park	Calrossie/Cockburn (10)	21, 22, 31
#23	Berwick Athletic Field	Calrossie/Cockburn (10)	17, 18
#24	CNR Fort Rouge Yards (South)	Calrossie/Cockburn (10)	19, 20,
#25	Wellington @ Doncaster St.	Tuxedo (40); Doncaster (14)	32, 33, 34
#26	Bourkevale Community Centre	Douglas Park (15); Ferry Road (17); Riverbend C (34)	35, 36, 37, 38, 39,
#27	Omand Park	Clifton (9); Tylehurst (41)	40, 41, 42, 43, 44
#28	Great West Life parking lot	Colony (11); Cornish (12)	45, 46, 47
#29	George @ Argyle St. (riverbank)	Alexander (1); Bannatyne (7)	48, 49
#30	Juba Park	Alexander (1); Bannatyne (7)	50, 51
#31	Barber Park	Syndicate (39)	78 79, 80
#32	Norquay Community Centre	Selkirk (36)	81, 82, 83, 84
#33	St. John's Park	St. John's (37)	85, 86, 87, 88
#34	Marymound School	Newton (30)	89, 90, 91, 92
#35	Kildonan Park SW	Armstrong (2)	93, 94, 95

CSO - Storage/High Rate Treatment:
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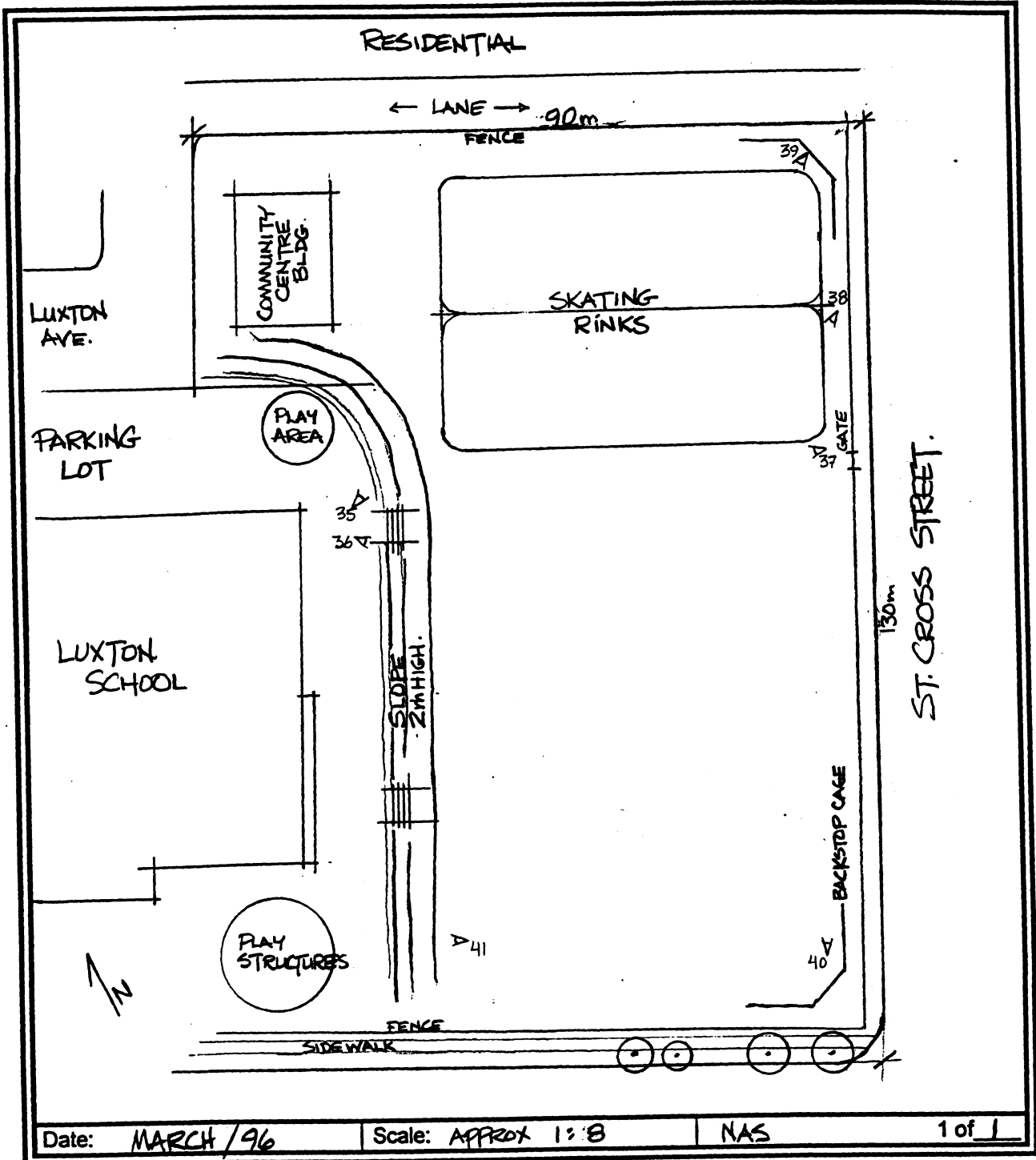
Site #: 1 Name: ELMWOOD PARK Location: HART (18); MUNROE (29)



CSO - Storage/High Rate Treatment:
Site Plan Map(s)

#510E3845

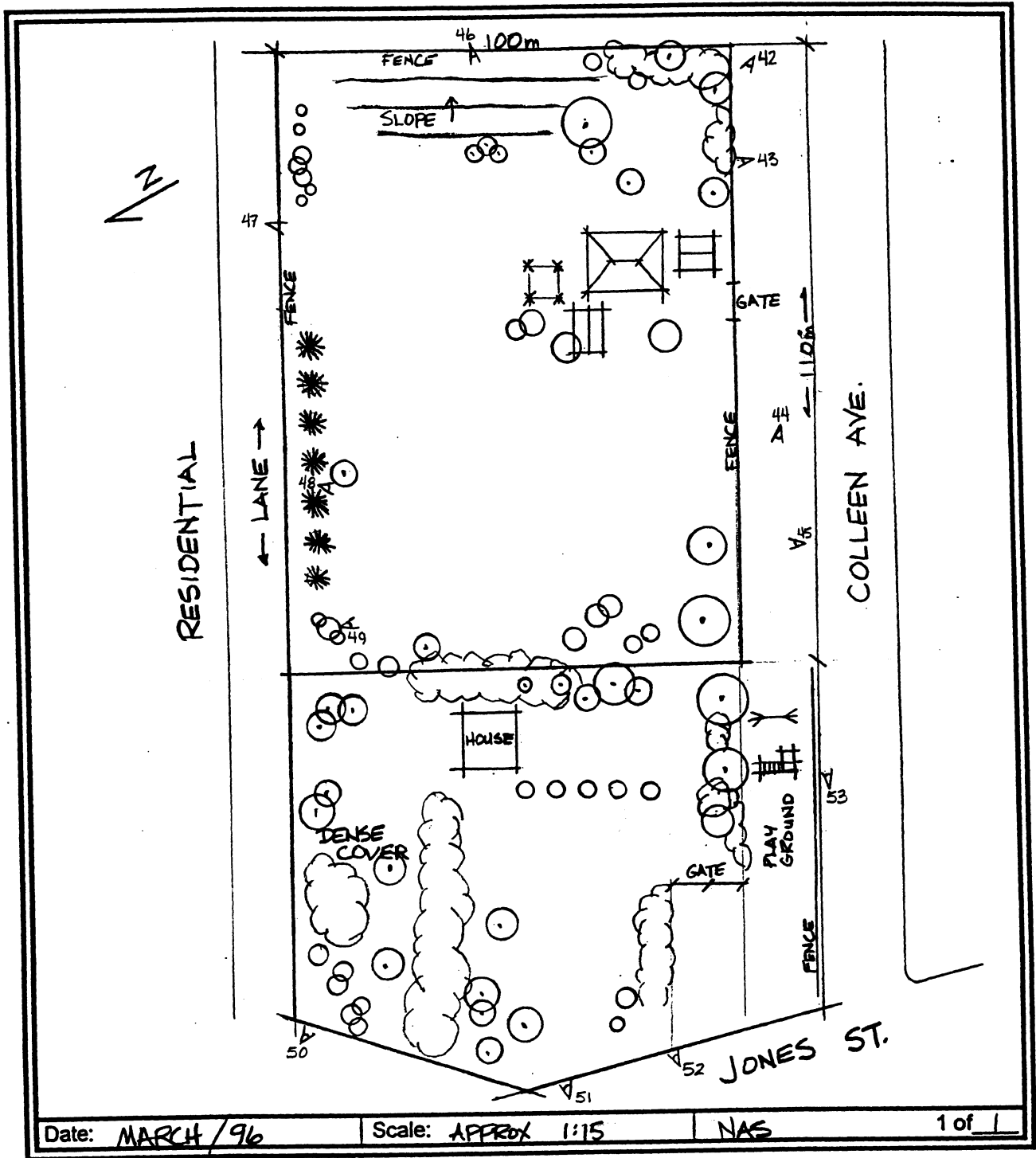
Site #: 2 Name: LUXTON SCHOOL Location: POLSON (32)



CSO - Storage/High Rate Treatment:
Site Plan Map(s)

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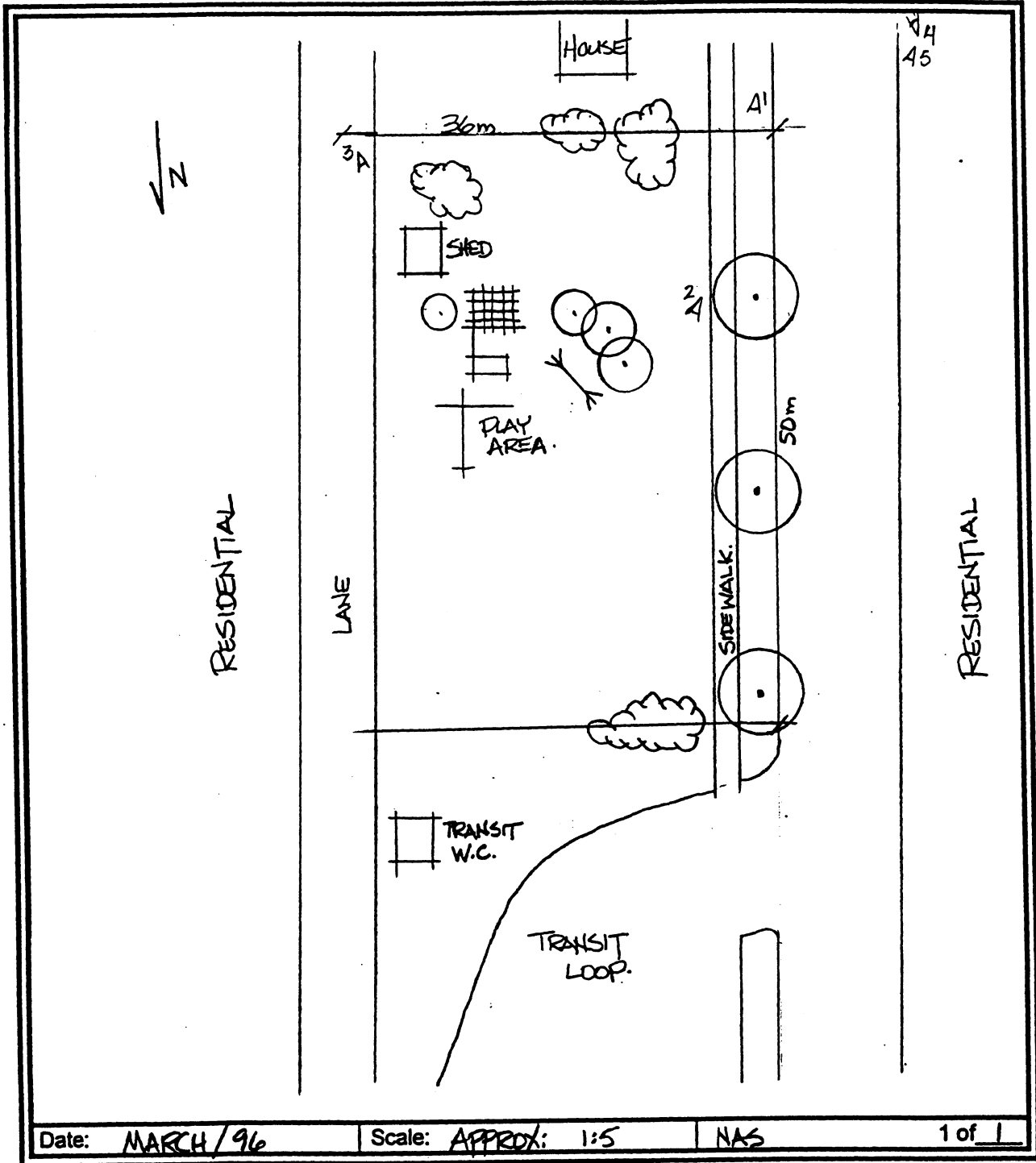
Site #: 3 Name: 7-OAKS HIST. SITE Location: JEFFERSON EAST (20a)



CSO - Storage/High Rate Treatment:
Site Plan Map(s)

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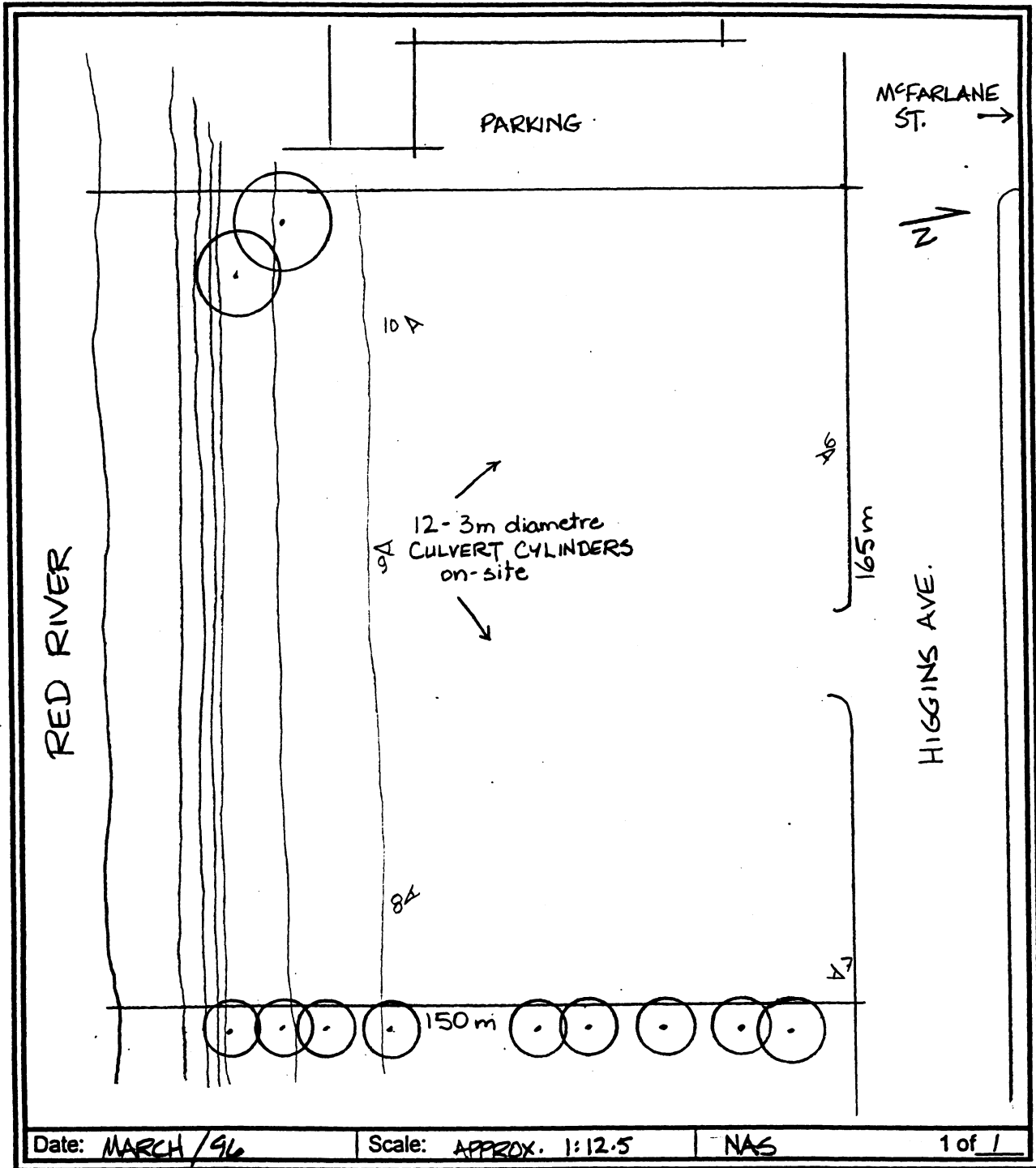
Site #: 4 Name: AUBREY PARK Location: AUBREY (5)



CSO - Storage/High Rate Treatment:
Site Plan Map(s)

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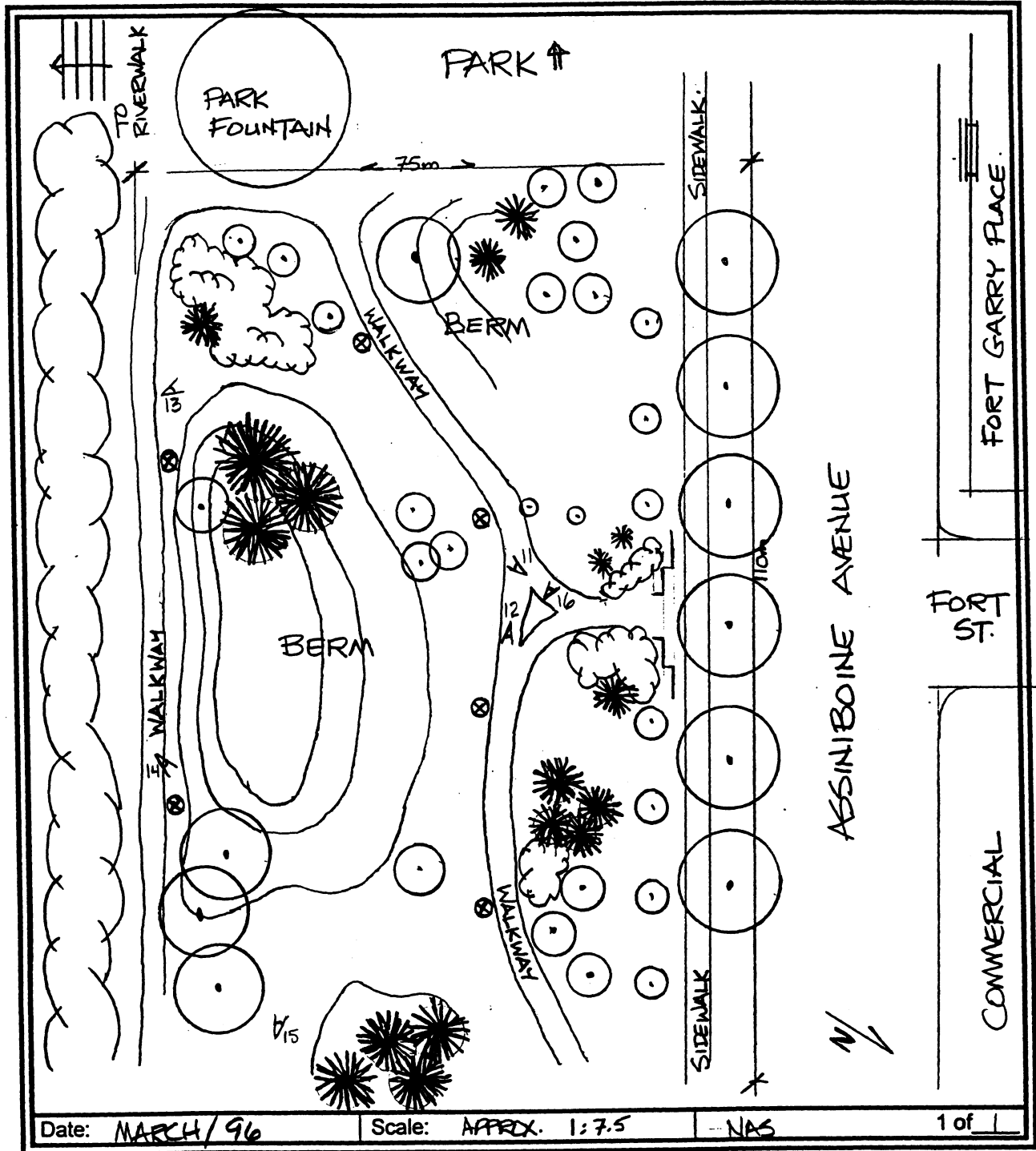
Site #: 5 Name: HIGGINS/MCFARLANE Location: BOYLE (8)



CSO - Storage/High Rate Treatment:
Site Plan Map(s)

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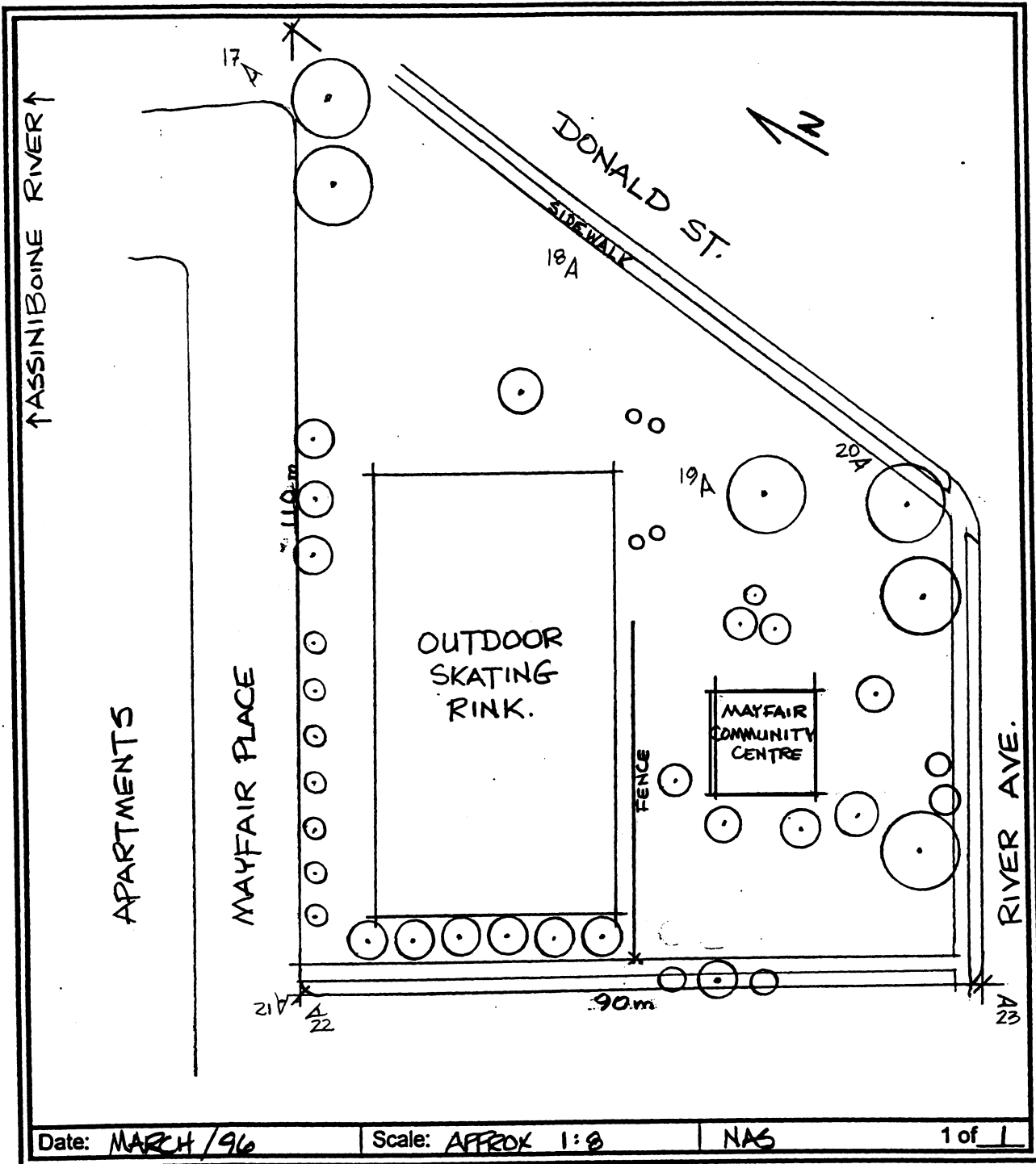
Site #: 6 Name: BONNYCASTLE PK. Location: ASSINIBOINE (4)



CSO - Storage/High Rate Treatment:
Site Plan Map(s)

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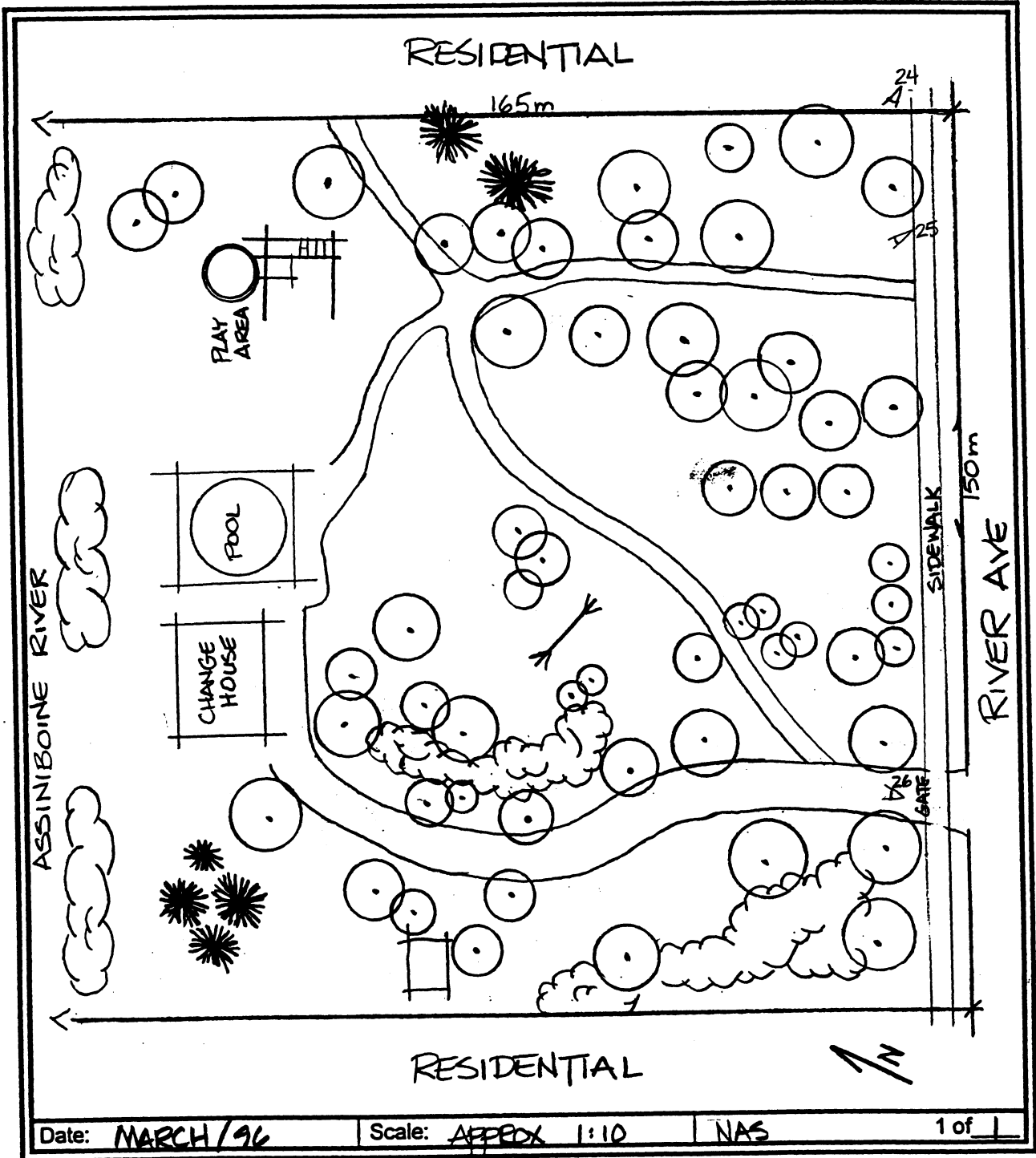
Site #: 7 Name: MAYFAIR PARK Location: RIVER (33)



CSO - Storage/High Rate Treatment:
Site Plan Map(s)

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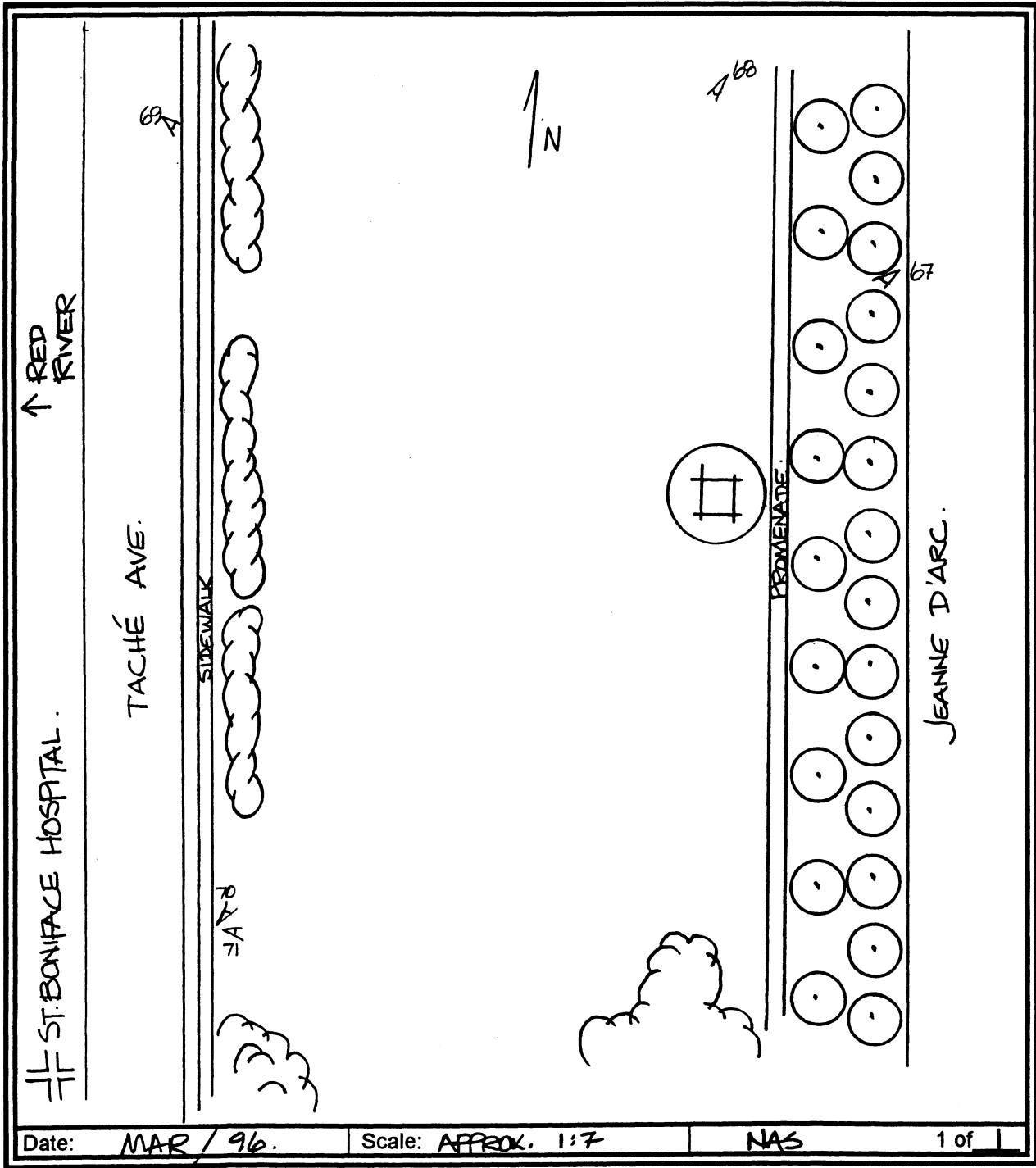
Site #: 8 Name: FT. ROUGE PARK Location: RIVER (33)



CSO - Storage/High Rate Treatment:
Site Plan Map(s)

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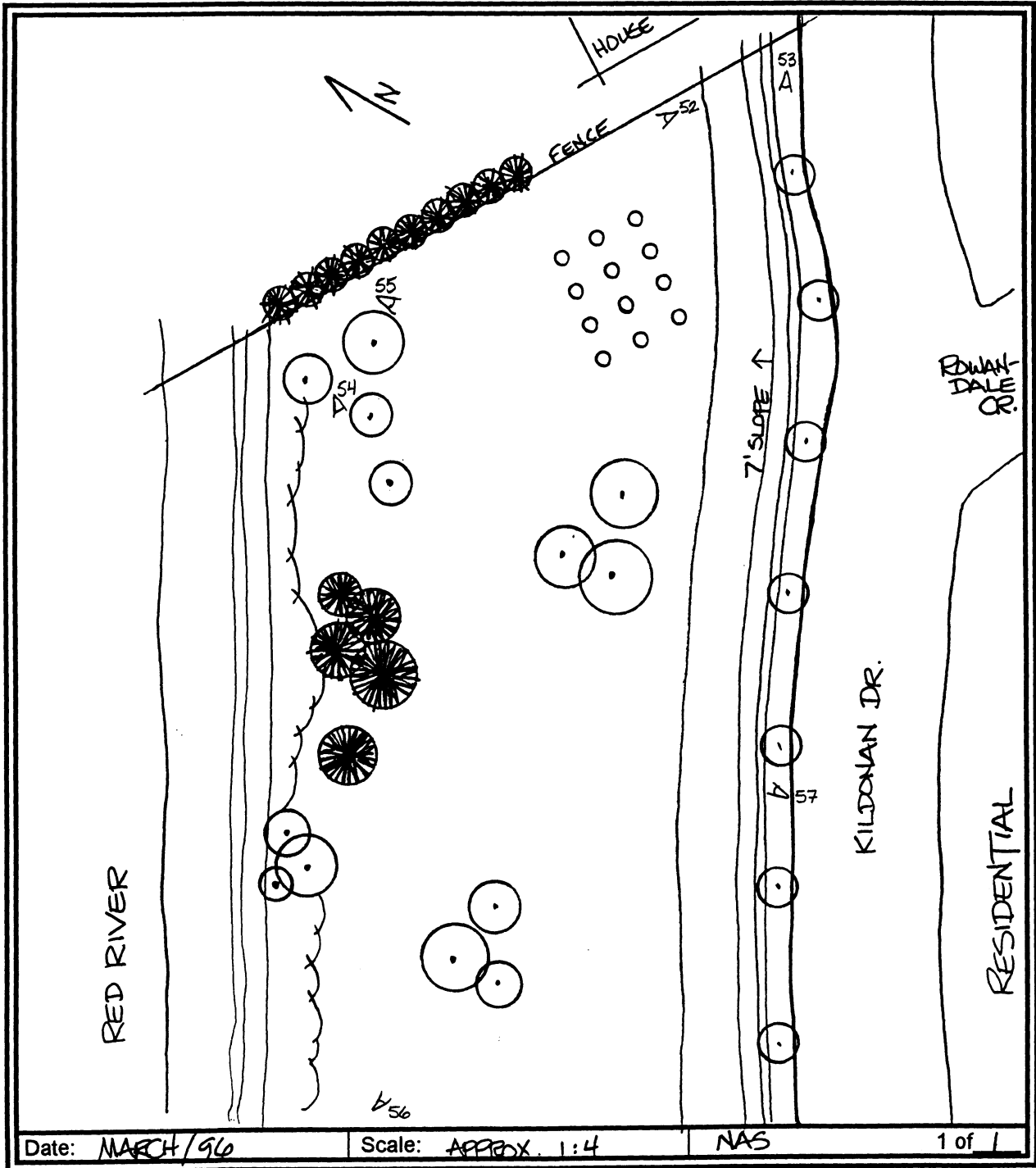
Site #: 9 Name: LA VERENDRYE PARK Location: DURMOULIN (16); DESPINS (13)



CSO - Storage/High Rate Treatment:
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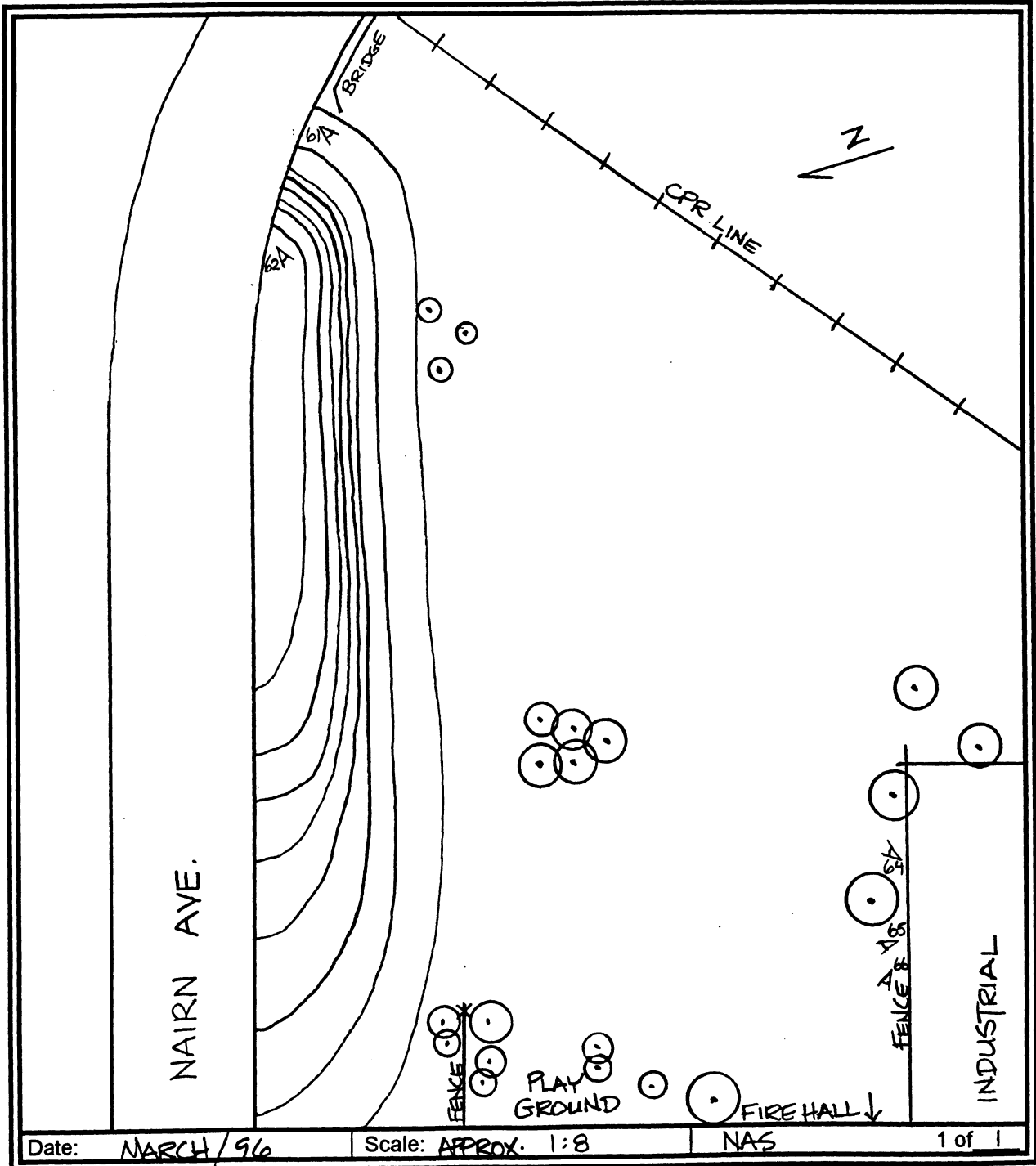
Site #: 10 Name: FRASER GROVE PARK Location: HAWTHORN (19); LINDEN (23)



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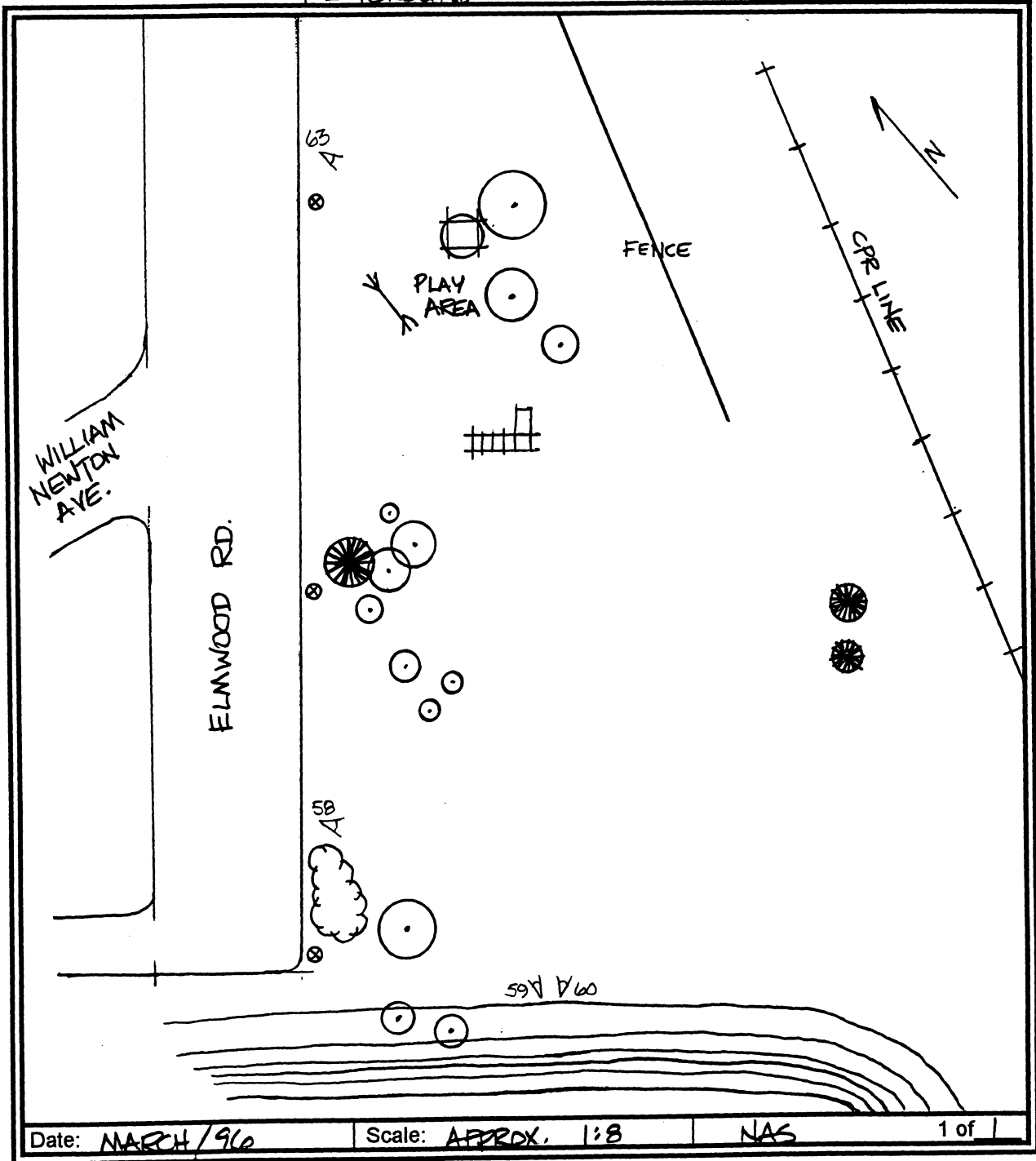
Site #: 11 Name: MONTCALM PLAY-GROUND Location: MISSION (27)



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Site #: 12 Name: CHALMERS SOUTH PLAYGROUND Location: ROLAND (35)



Date: MARCH/96

Scale: APPROX. 1:8

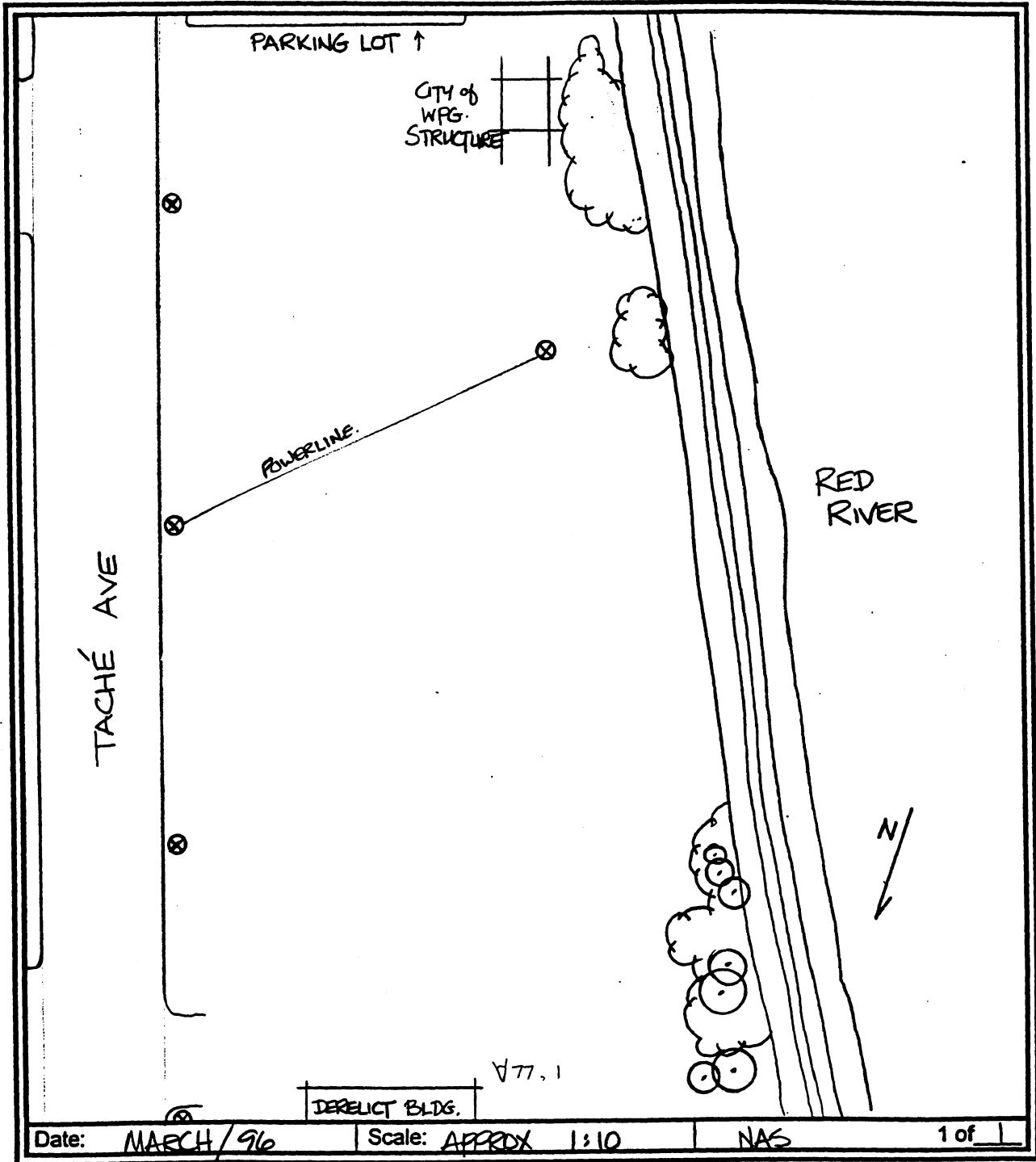
NAS

1 of 1

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Site #: 13 Name: N. PROMENADE TACHÉ Location: LA VERENDRYE (22)

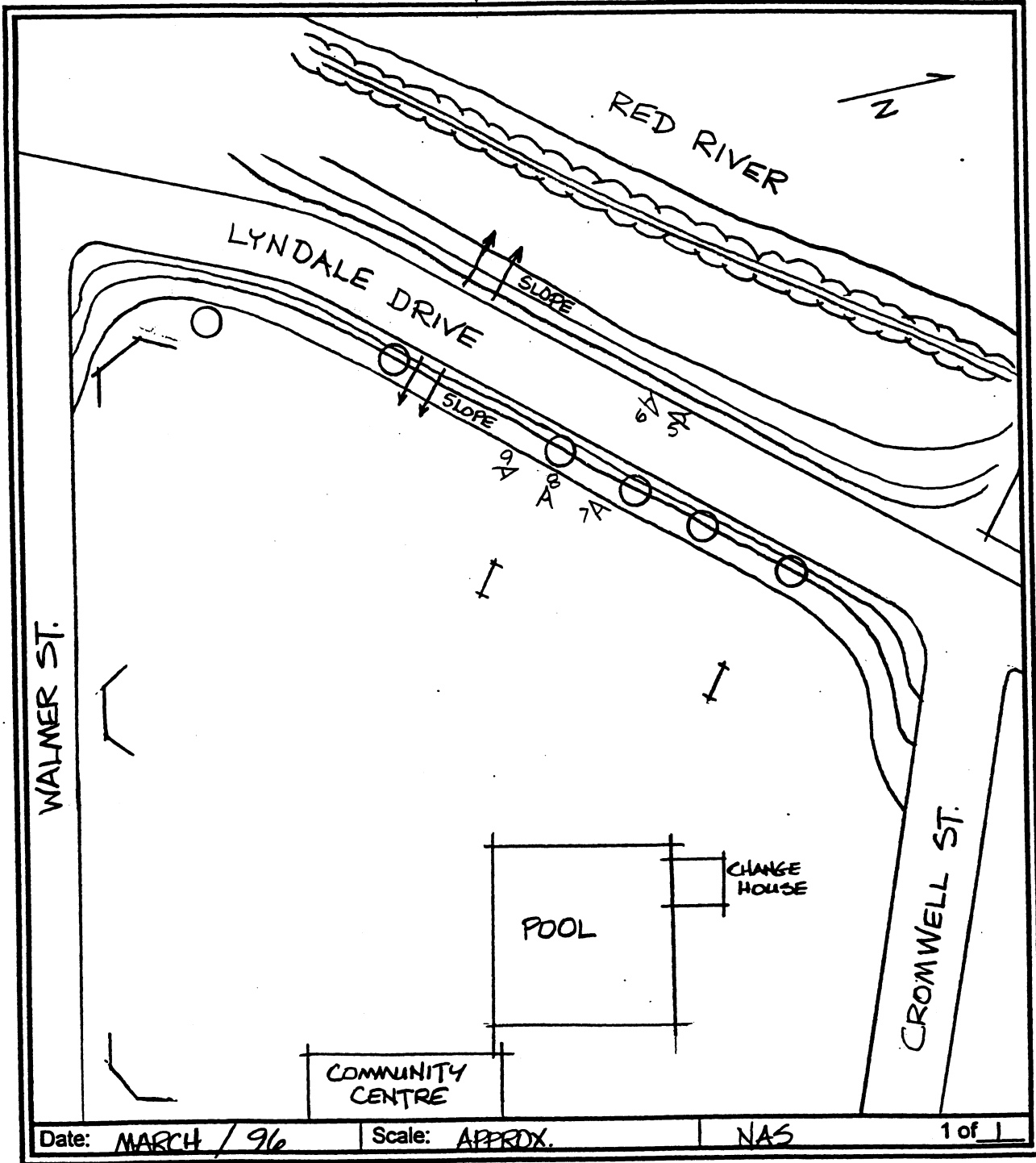


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CSO - Storage/High Rate Treatment:
Site Plan Map(s)

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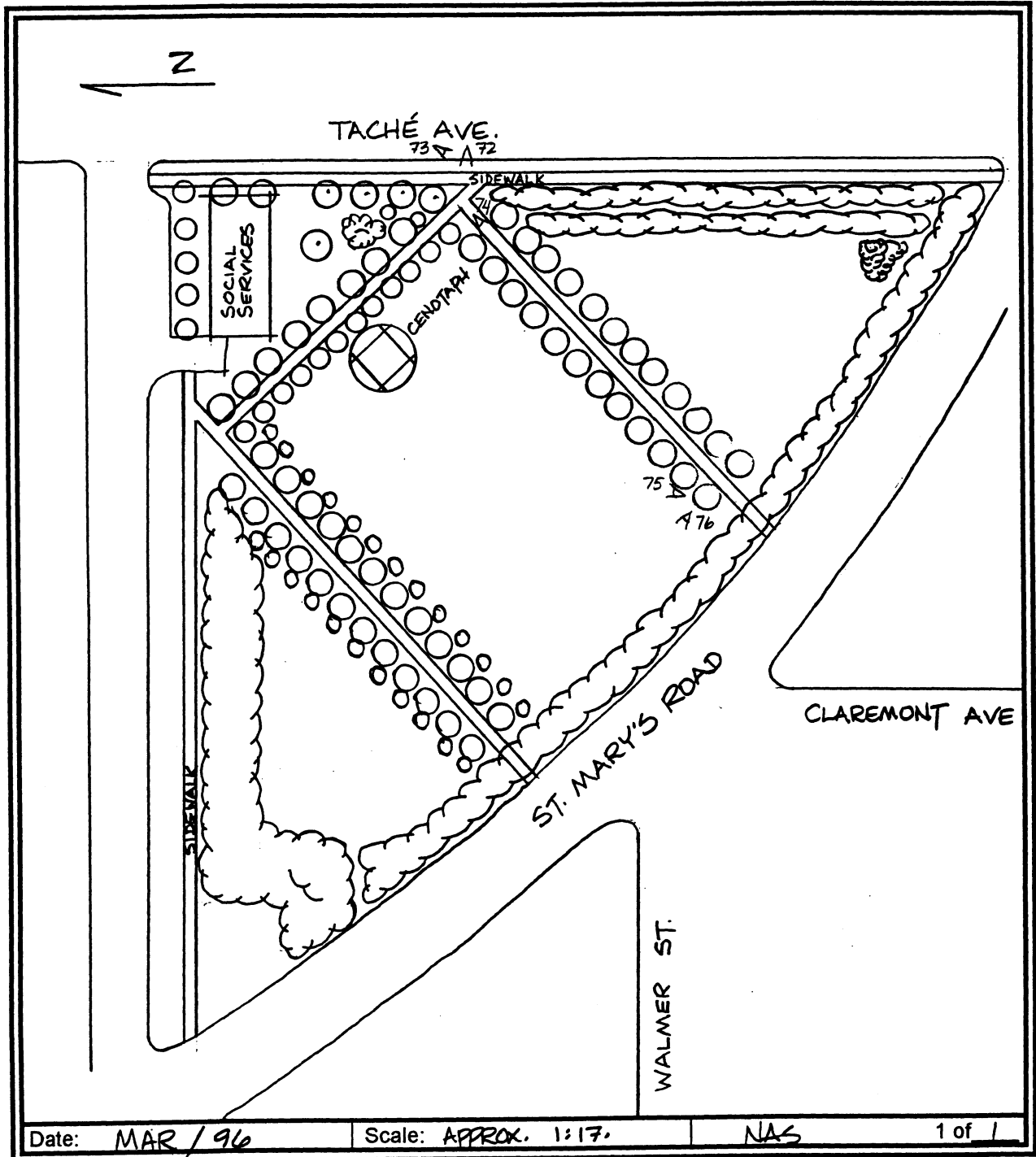
Site #: 14 Name: NORWOOD COMMUNITY CENTRE Location: MARION (25)



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Site #: 15 Name: CORONATION PARK Location: METCALFE (26)



Date: MAR / 96

Scale: APPROX. 1:17.

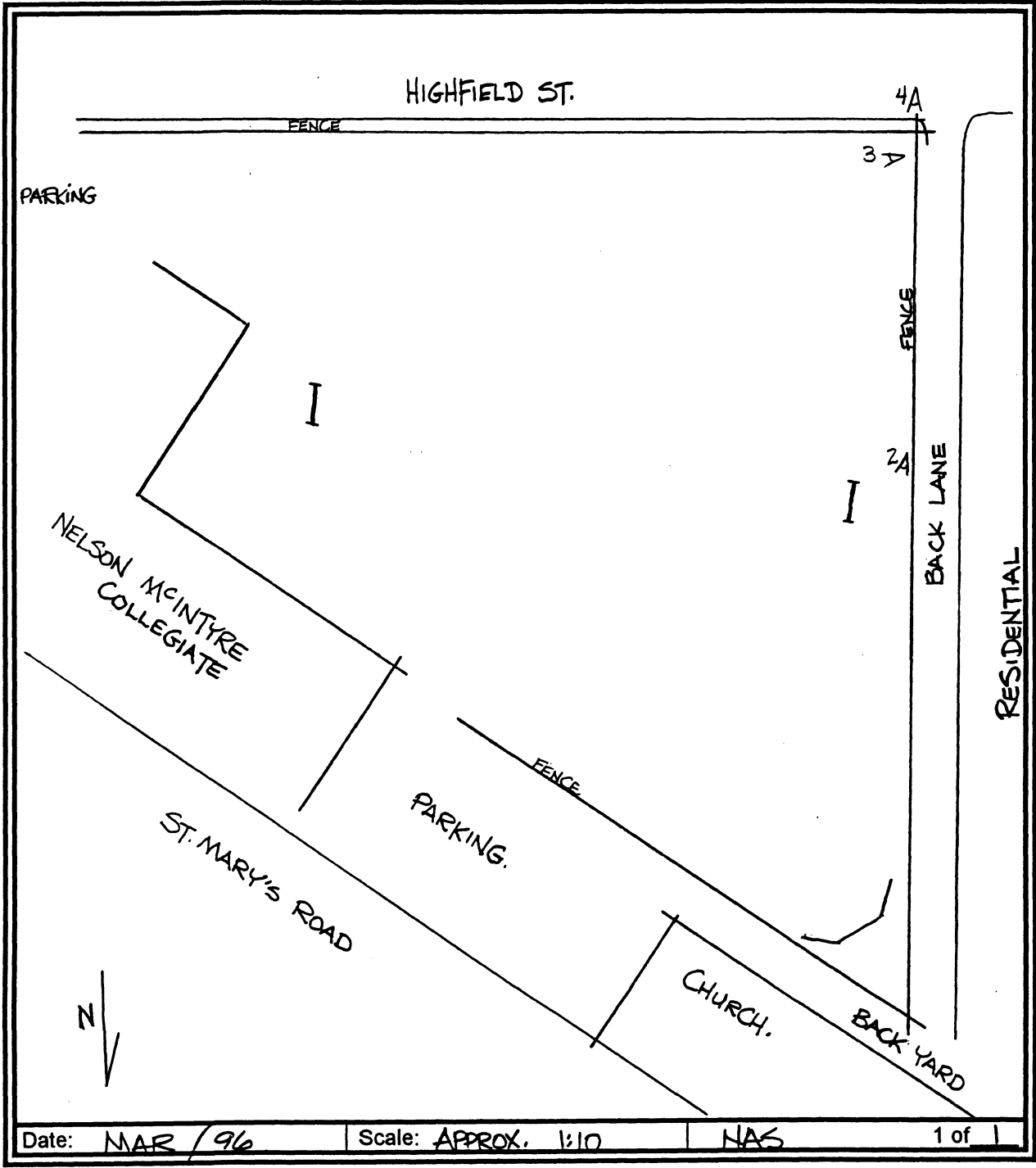
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CSO - Storage/High Rate Treatment:
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#510E3845

Site #: 16 Name: NELSON McINTYRE Location: METCALFE (26)

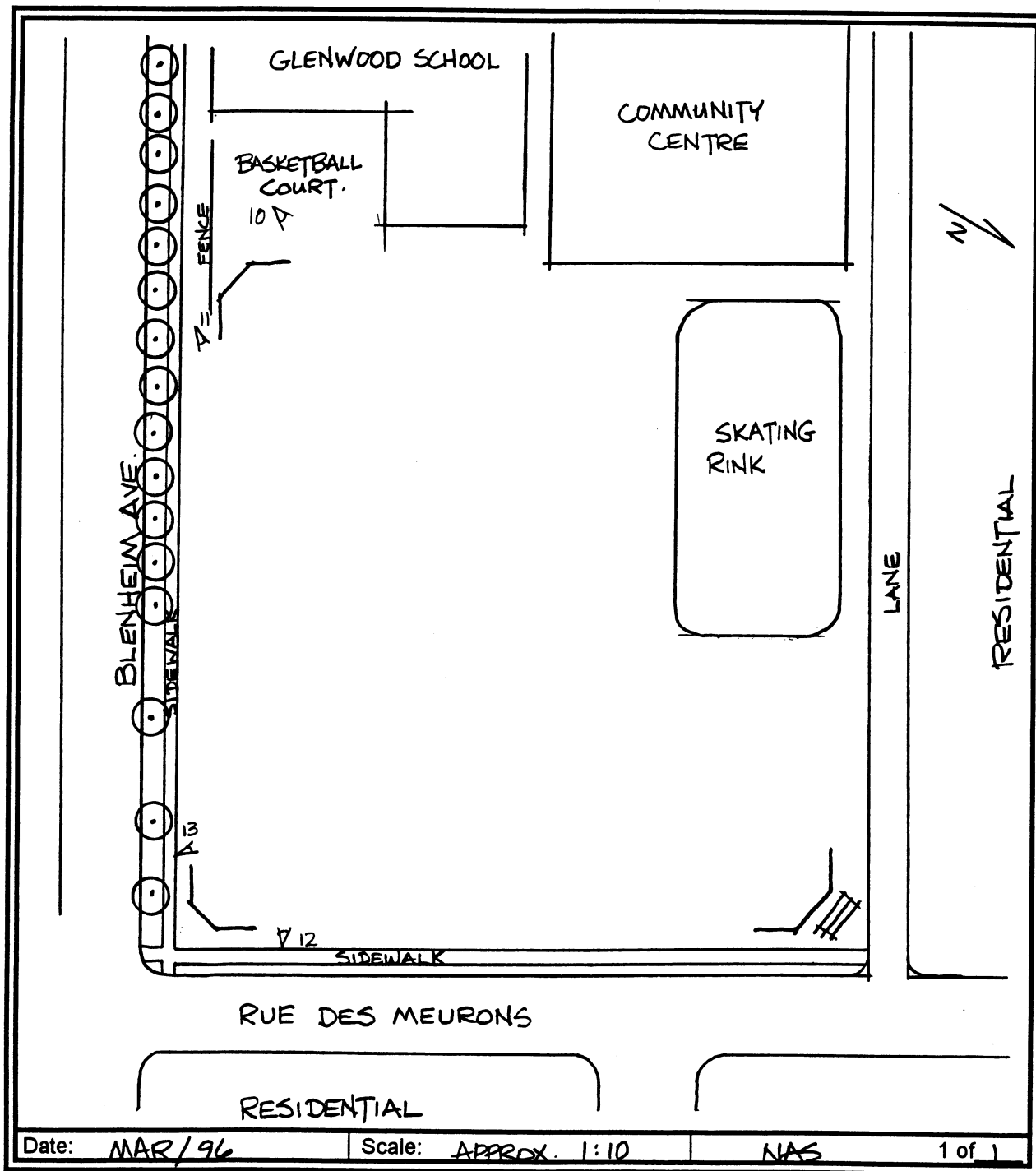


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CSO - Storage/High Rate Treatment:
Site Plan Map(s)

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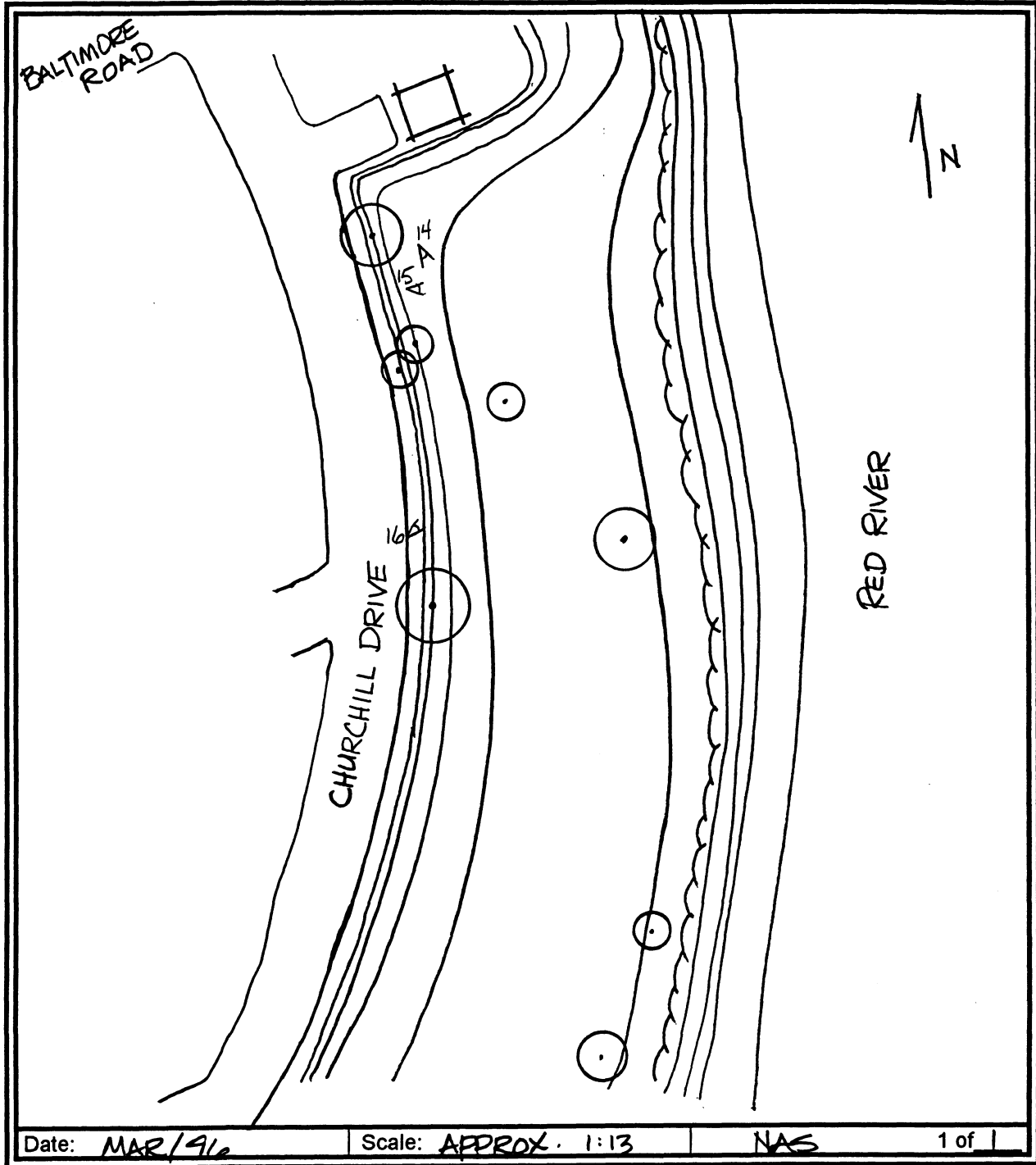
Site #: 17 Name: GLENWOOD SCHOOL Location: MAGER DRIVE (24)



CSO - Storage/High Rate Treatment:
Site Plan Map(s)

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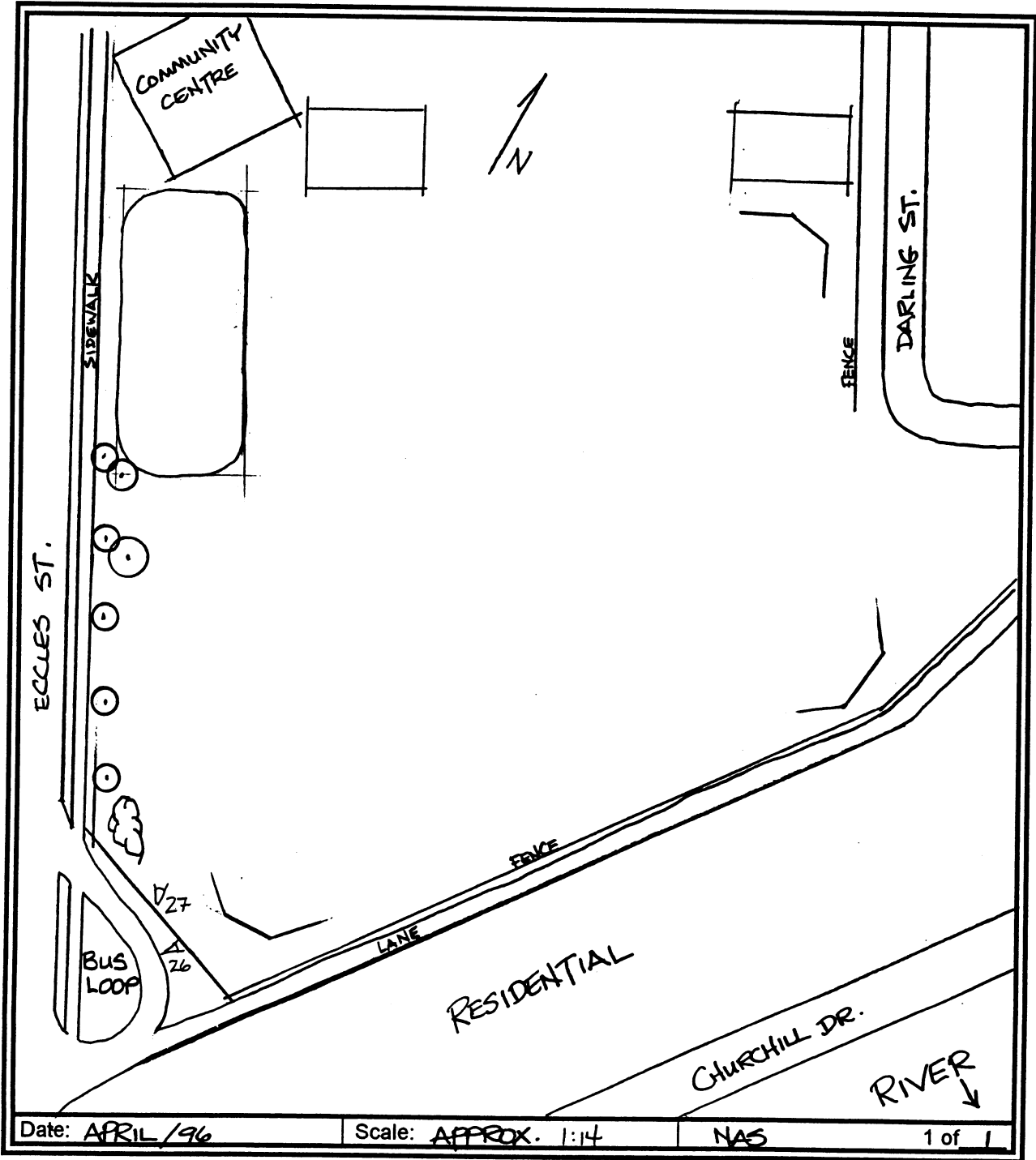
Site #: 18 Name: CHURCHILL DR. PARK E. Location: BALTIMORE (6)



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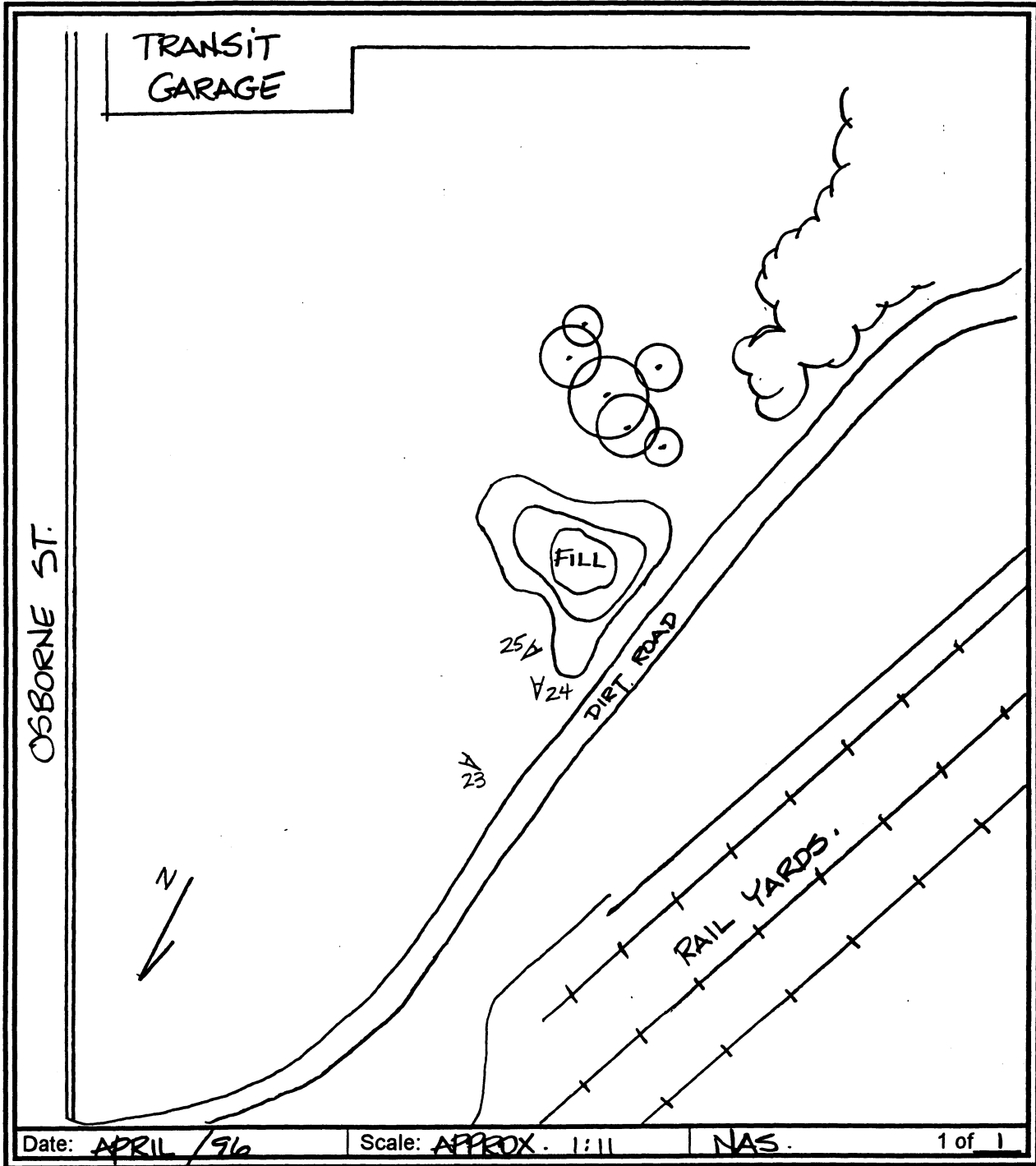
Site #: 19 Name: RIVERVIEW C.C. Location: BALTIMORE (6)



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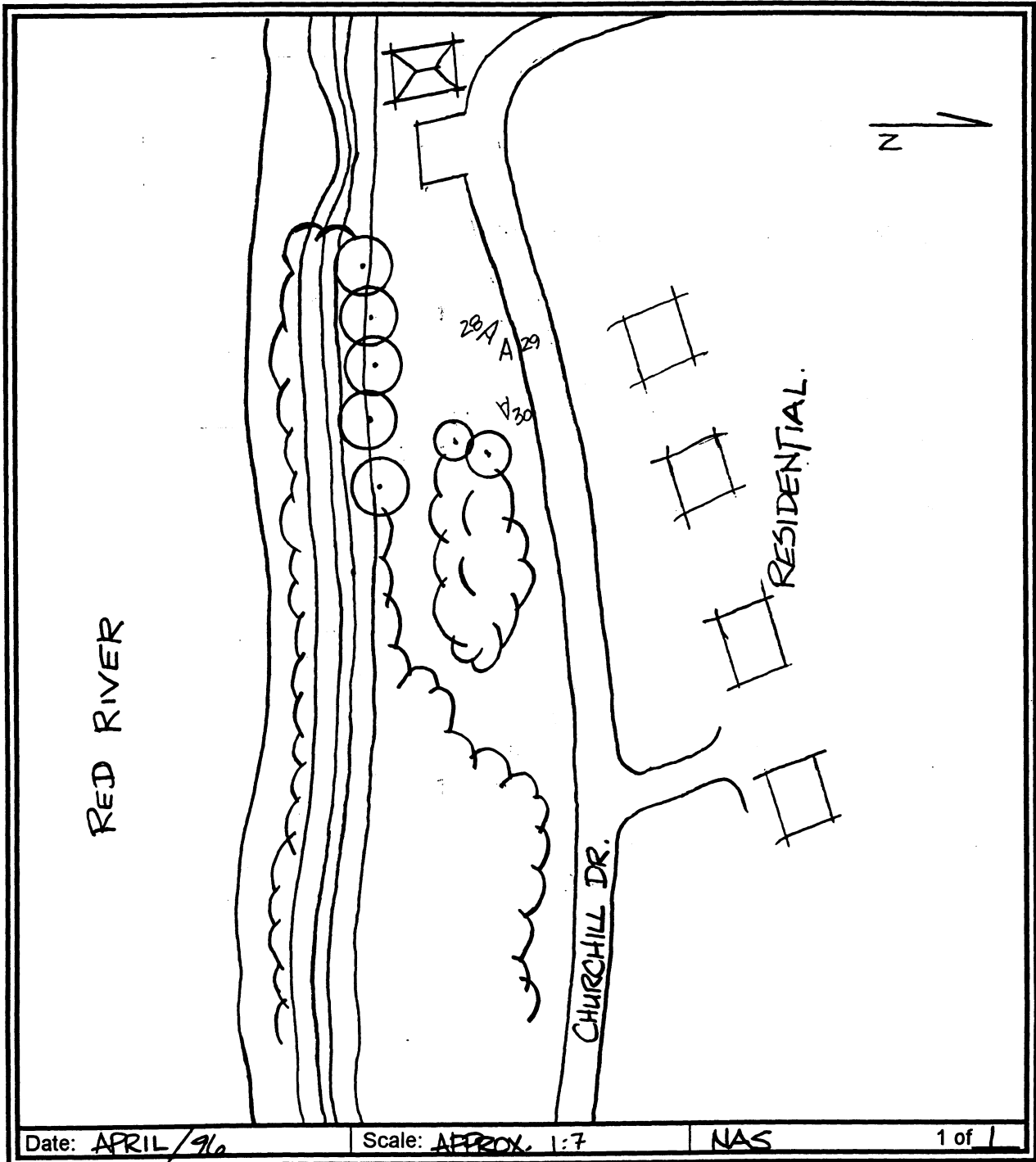
Site #: 20 Name: N of TRANSIT GARAGE Location: JESSIE (21)



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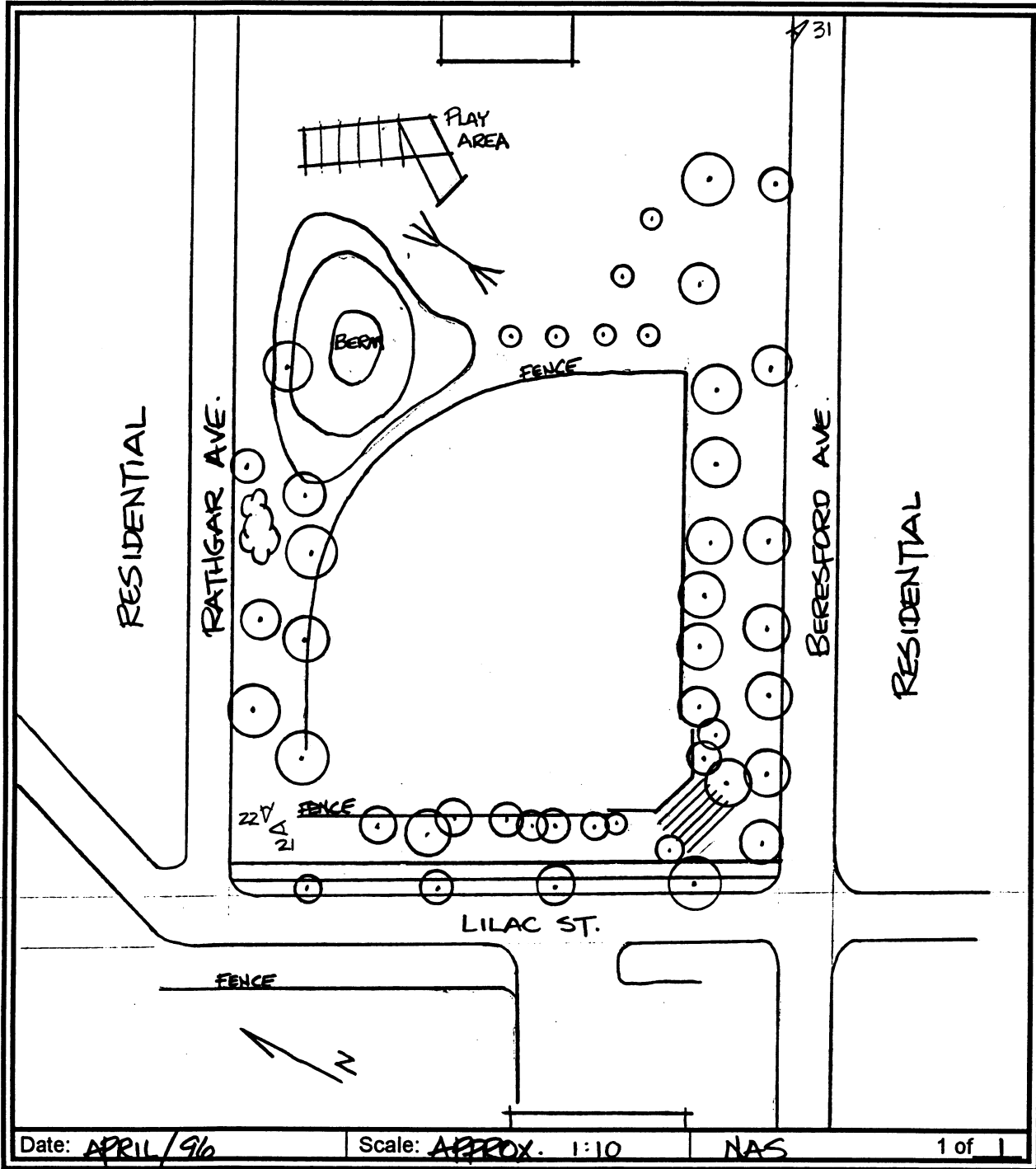
Site #: 21 Name: CHURCHILL DR. PK. W. Location: CALROSSIE/LOCKBURN (10)



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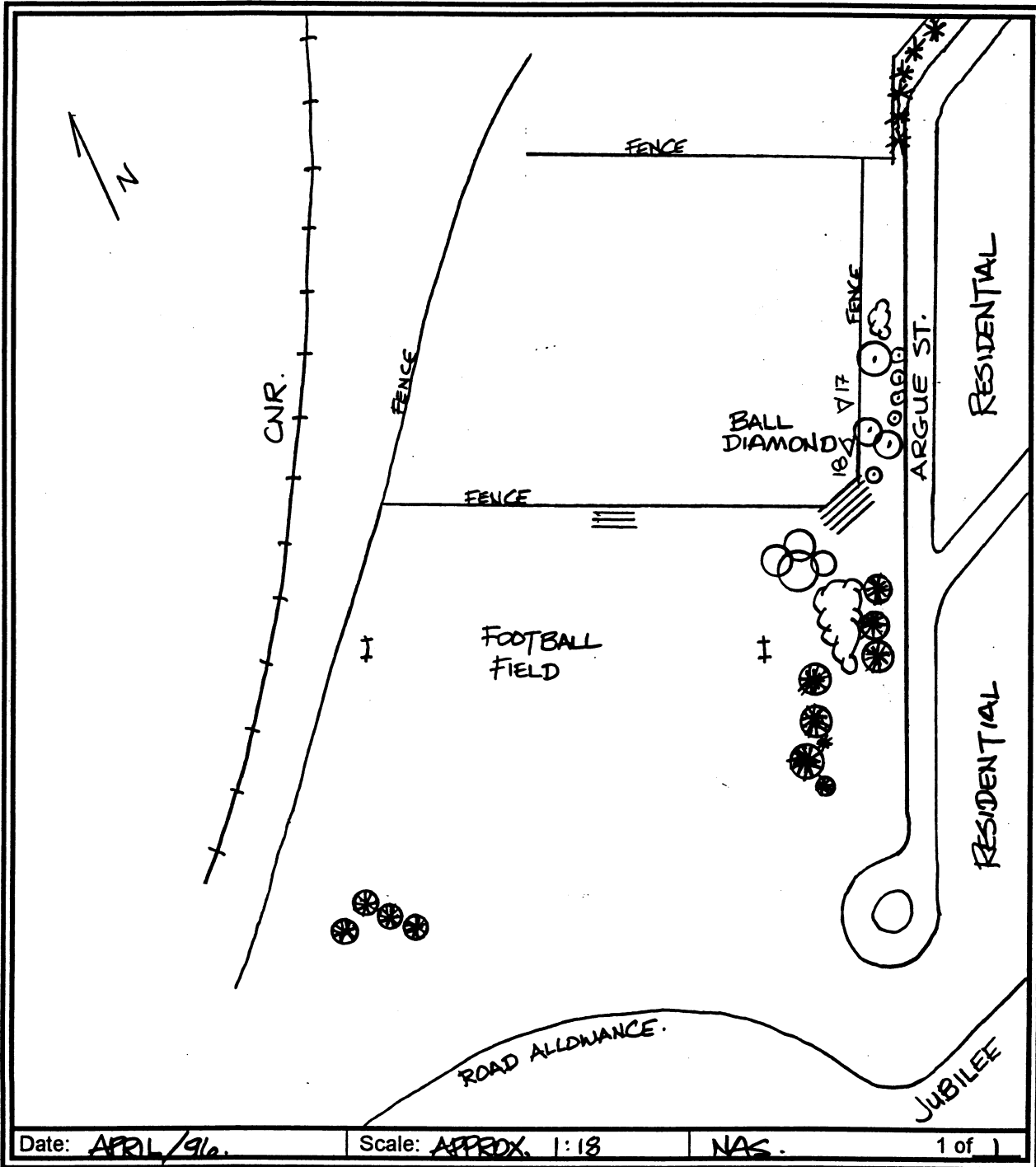
Site #: 22 Name: MCKITTRICK PARK Location: CALROSSIE/COCKBURN(10)



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Site Plan Map(s)

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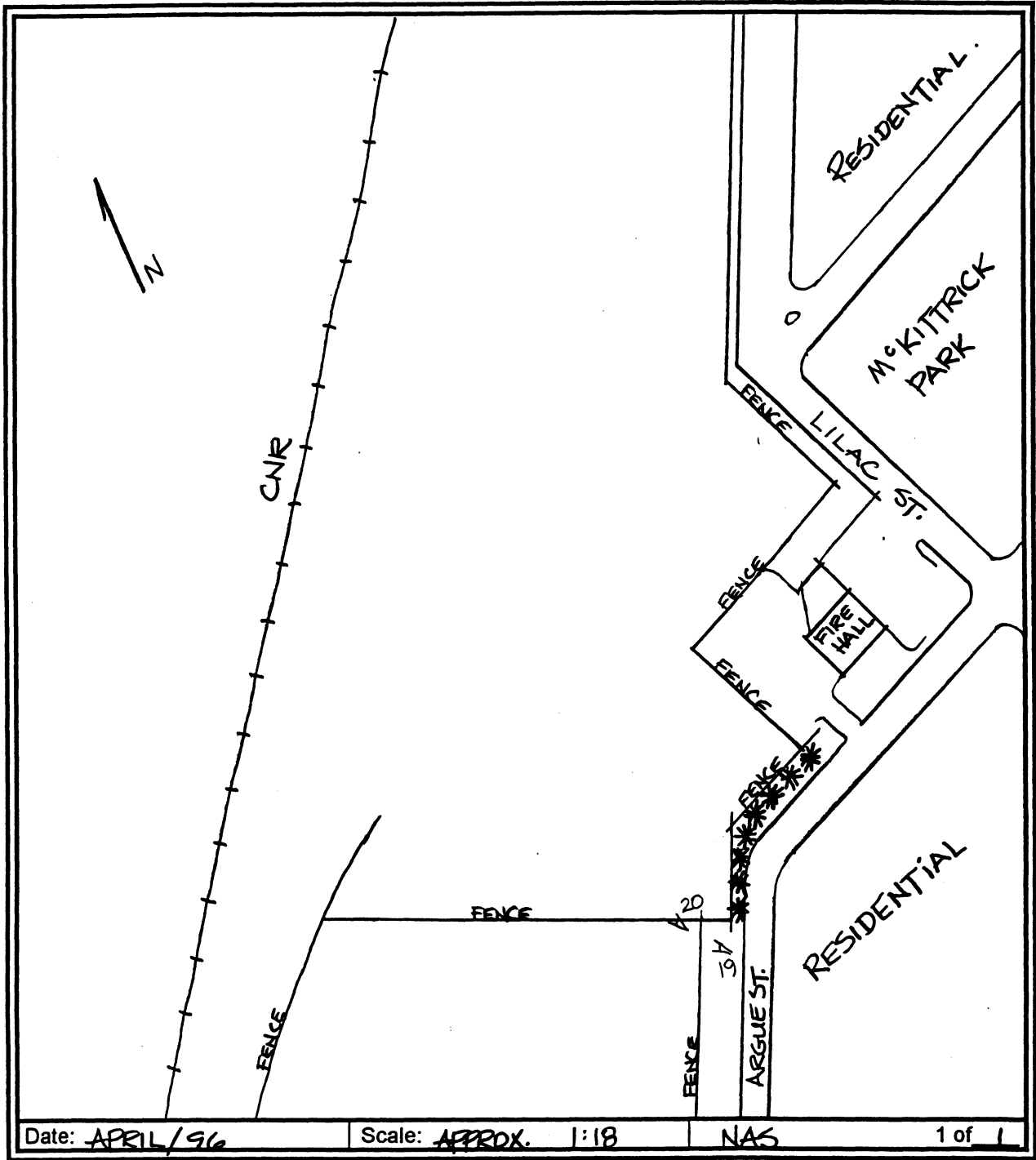
Site #: 23 Name: BERNICK ATHLETIC FIELD Location: CALROSSIE / COCKBURN (10)



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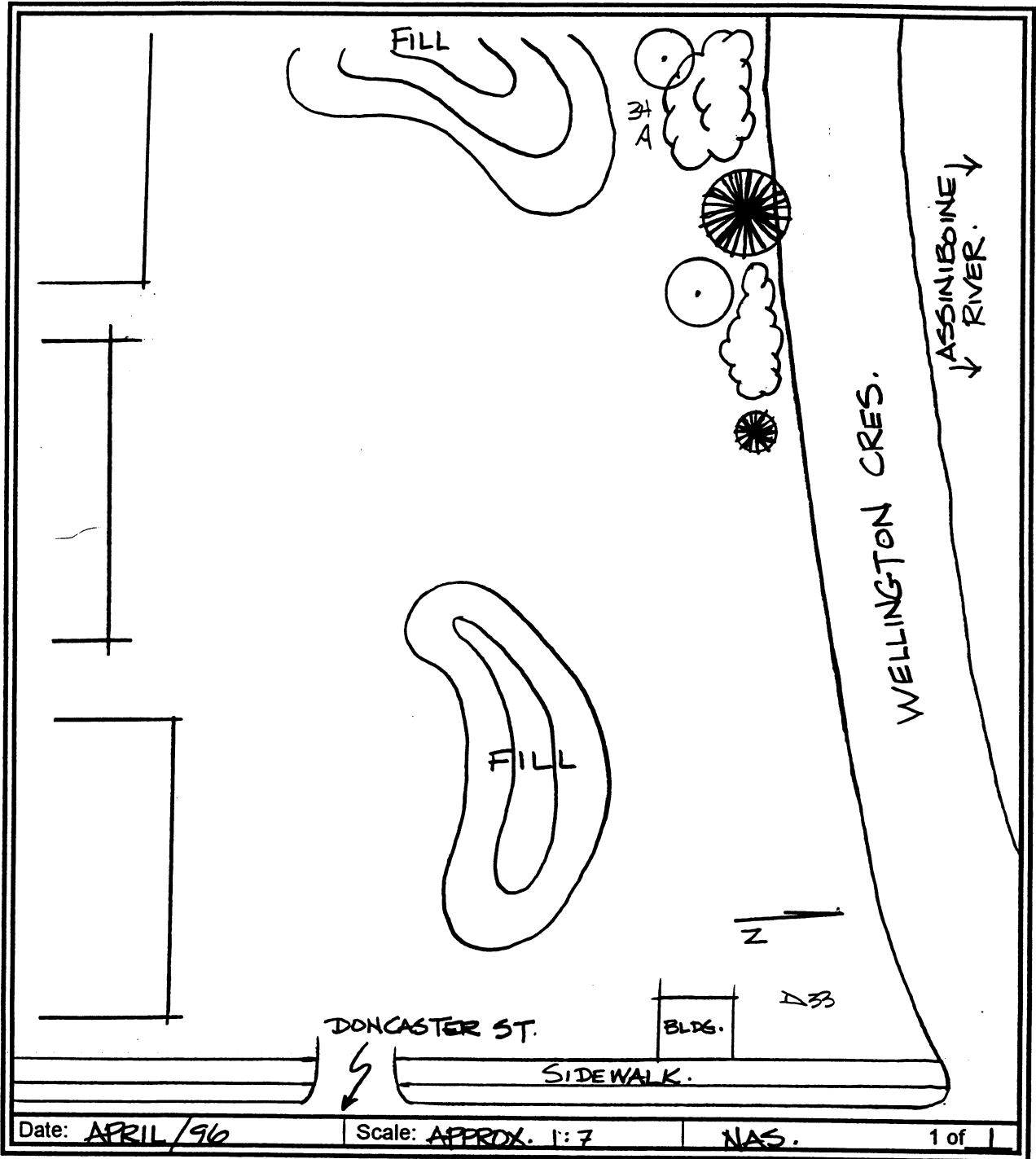
Site #: 24 Name: CNR FORT ROUGE YARDS Location: CALROSSIE/COCKBURN (10)



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Site #: 25 Name: HEBREW COLLEGE Location: TUXEDO (40); DONCASTER (14)

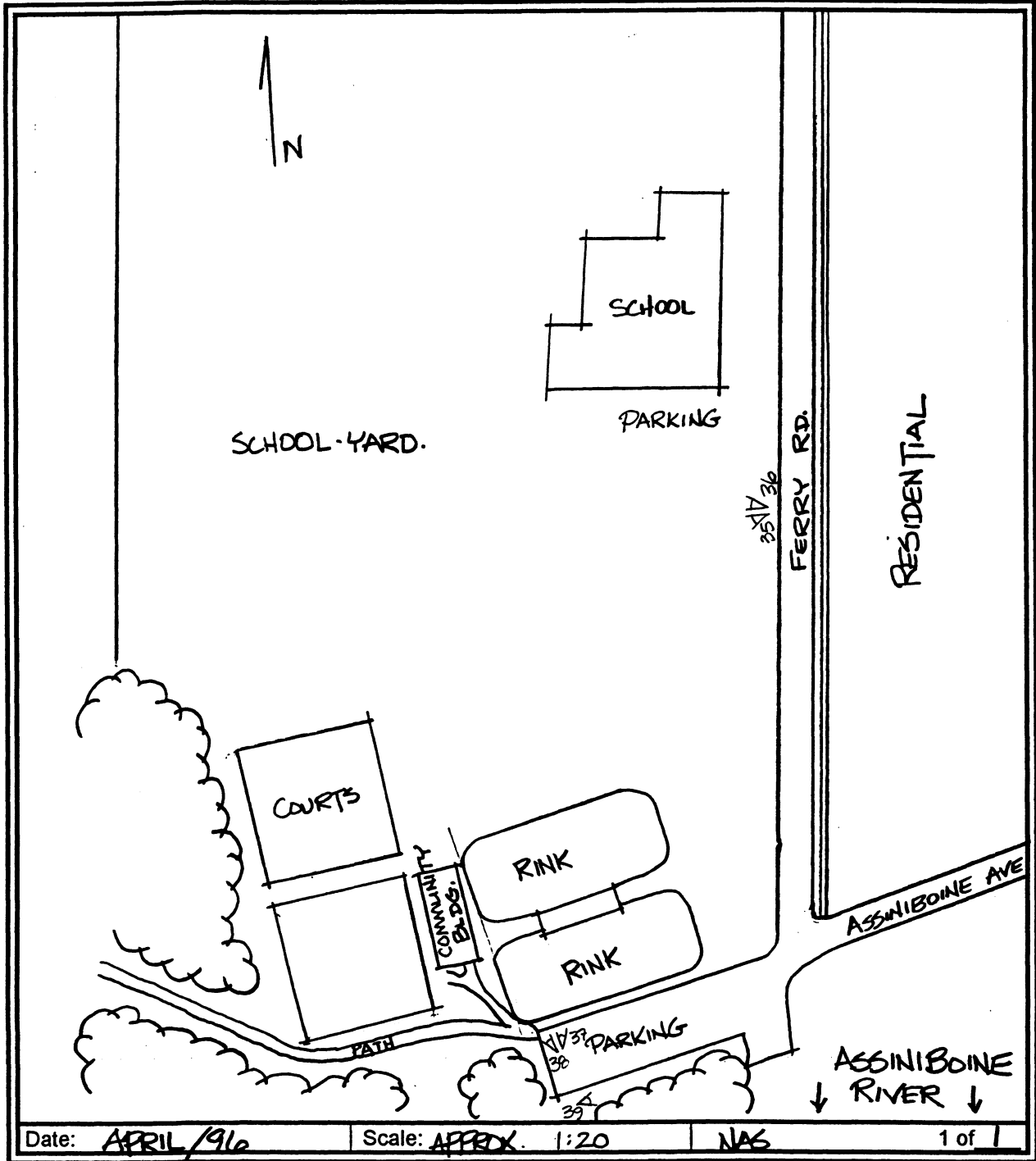


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CSO - Storage/High Rate Treatment:
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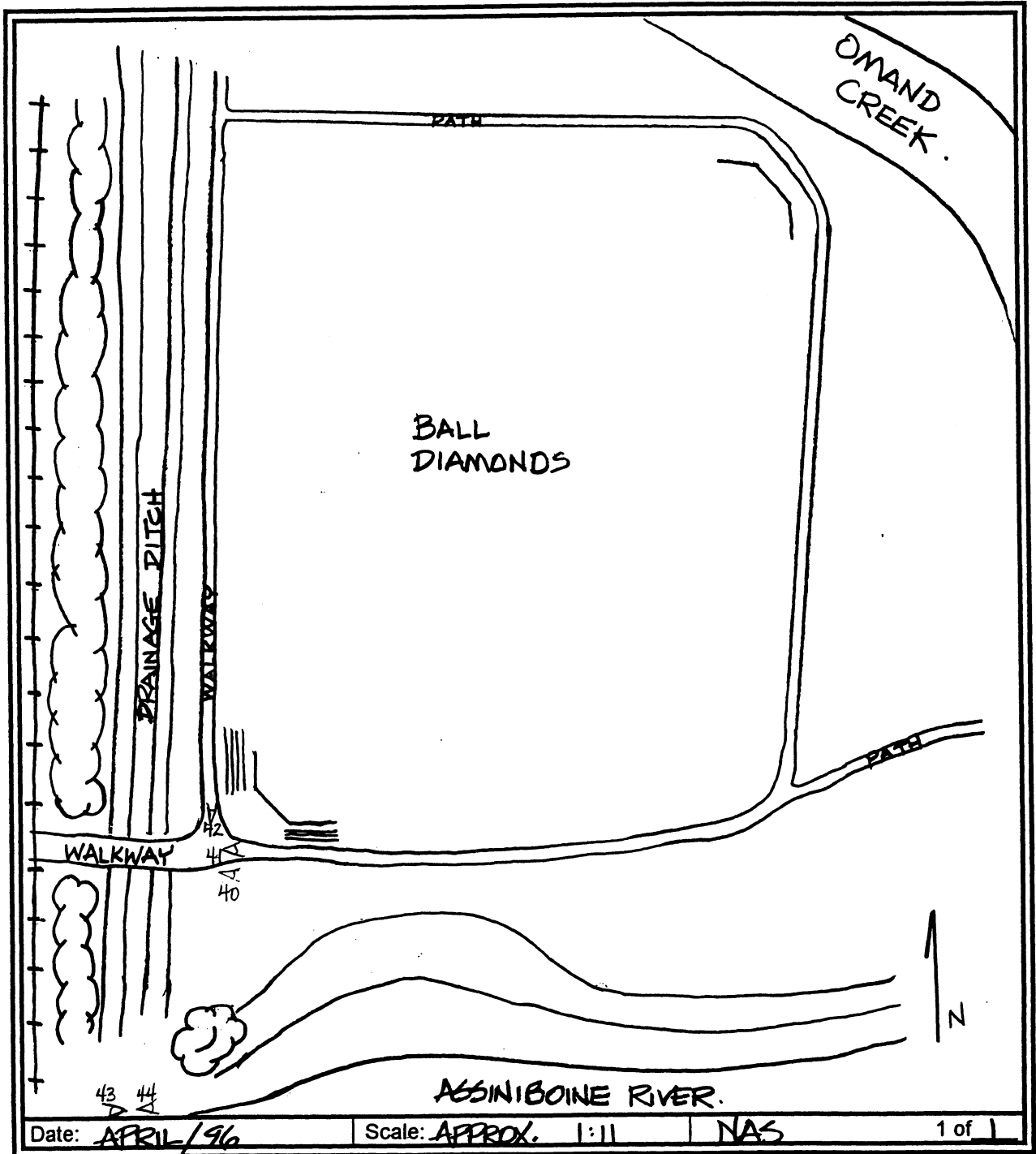
Site #: 26 Name: BOURKEVALE C.C. Location: DUNGLAS PK (15); FERRY RD. (17);
RIVERBEND C (34)



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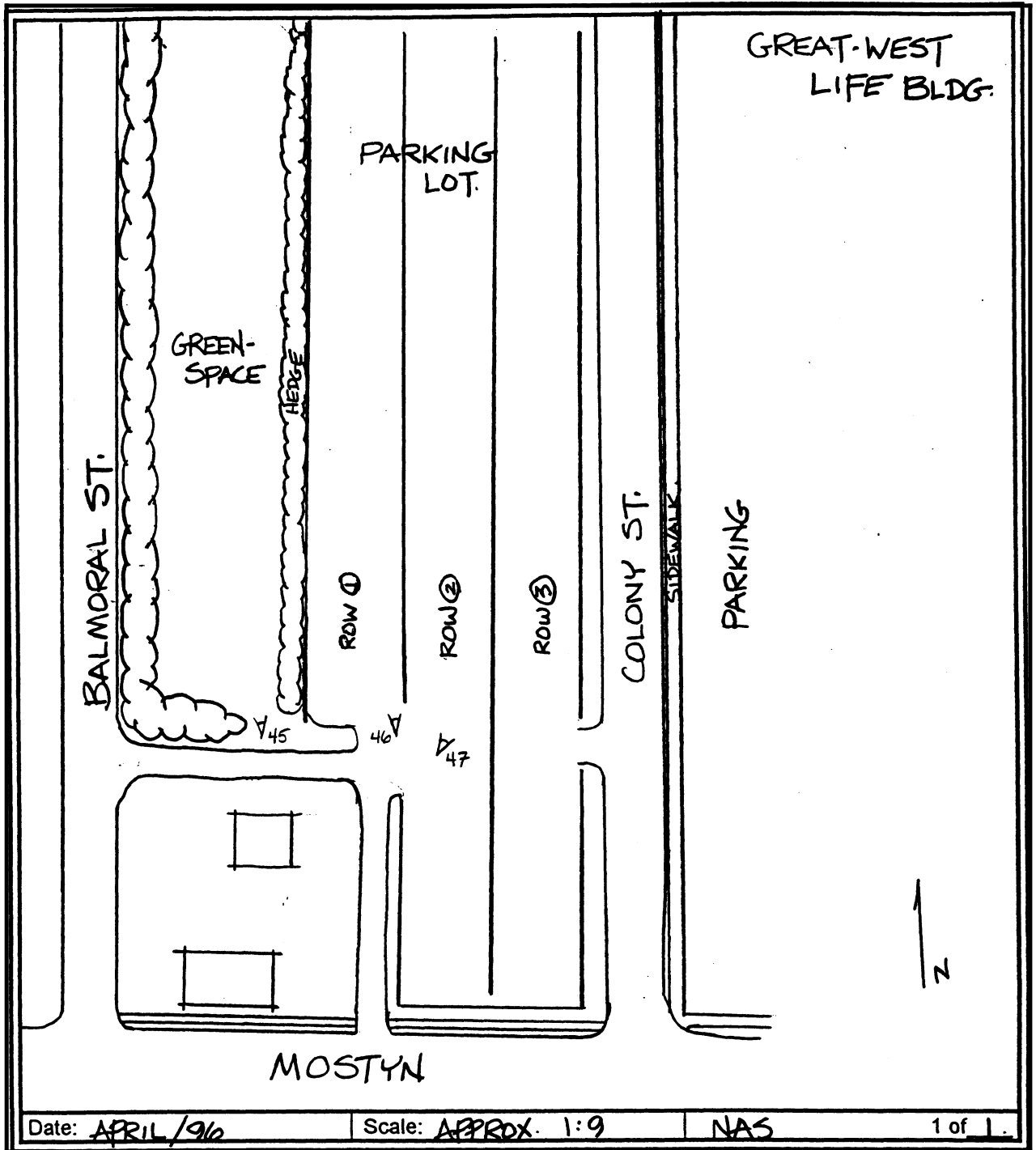
Site #: 27 Name: OMAND PARK. Location: CLIFTON(9); TYLEHURST(41)



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Site #: 28 Name: GREAT-WEST PKG. LOT. Location: COLONY (11); CORNISH (12).



Date: APRIL/96

Scale: APPROX. 1:9

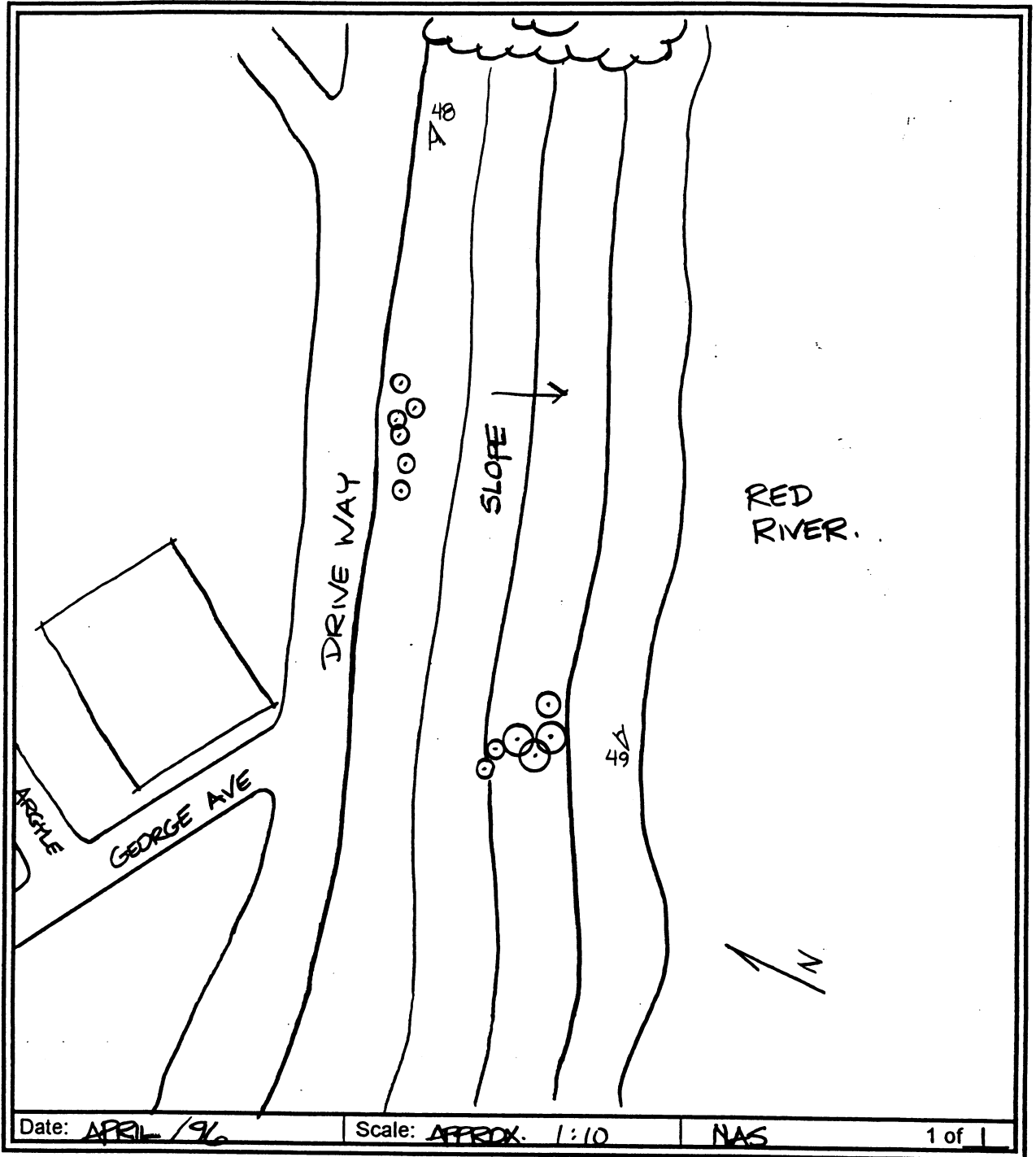
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CSO - Storage/High Rate Treatment:
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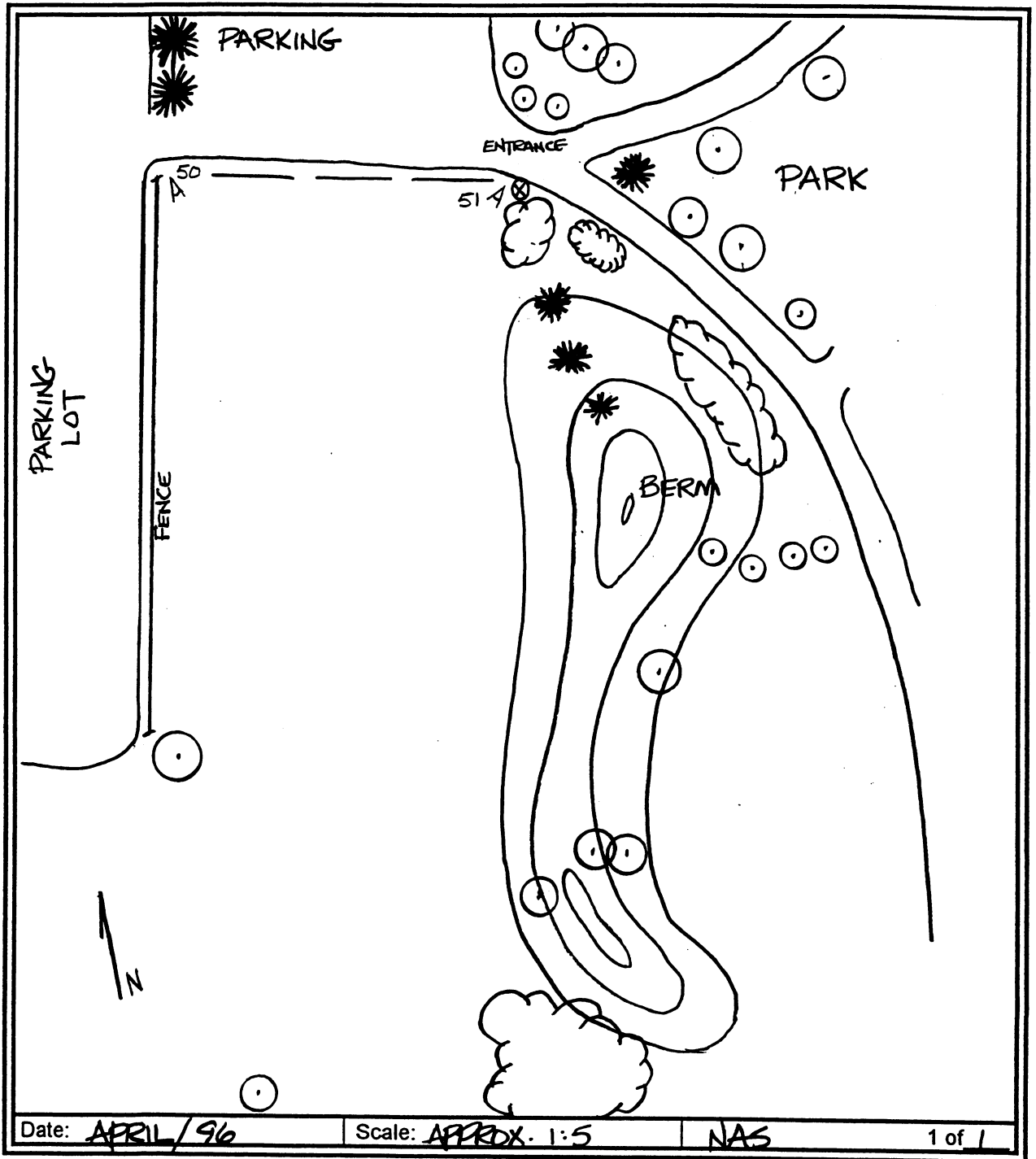
Site #: 29 Name: GEORGE @ ARGYLE Location: ALEXANDER (1); BANNATYNE (7)



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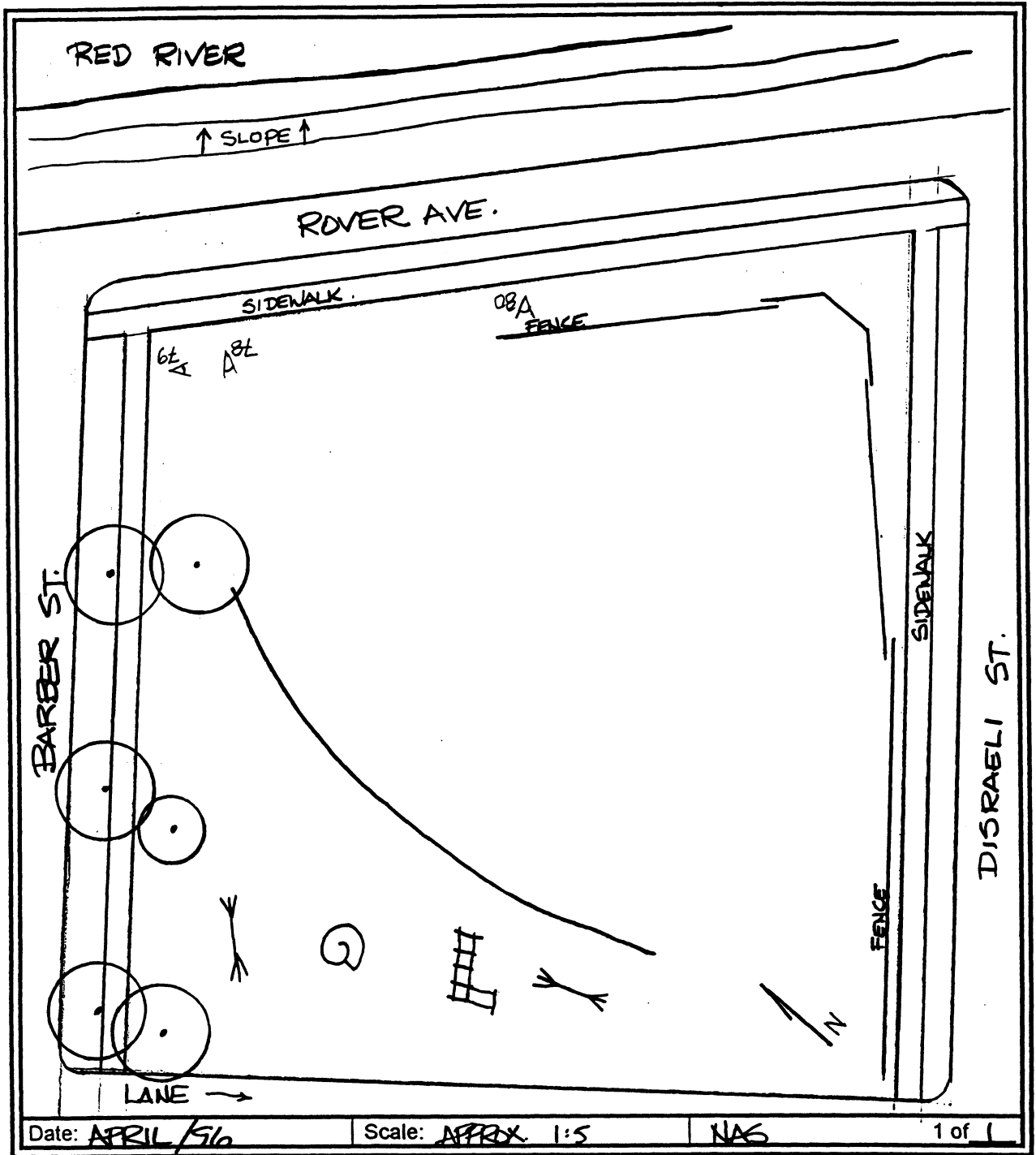
Site #: 30 Name: JUBA PARK. Location: ALEXANDER (1) & BANNATYNE (7)



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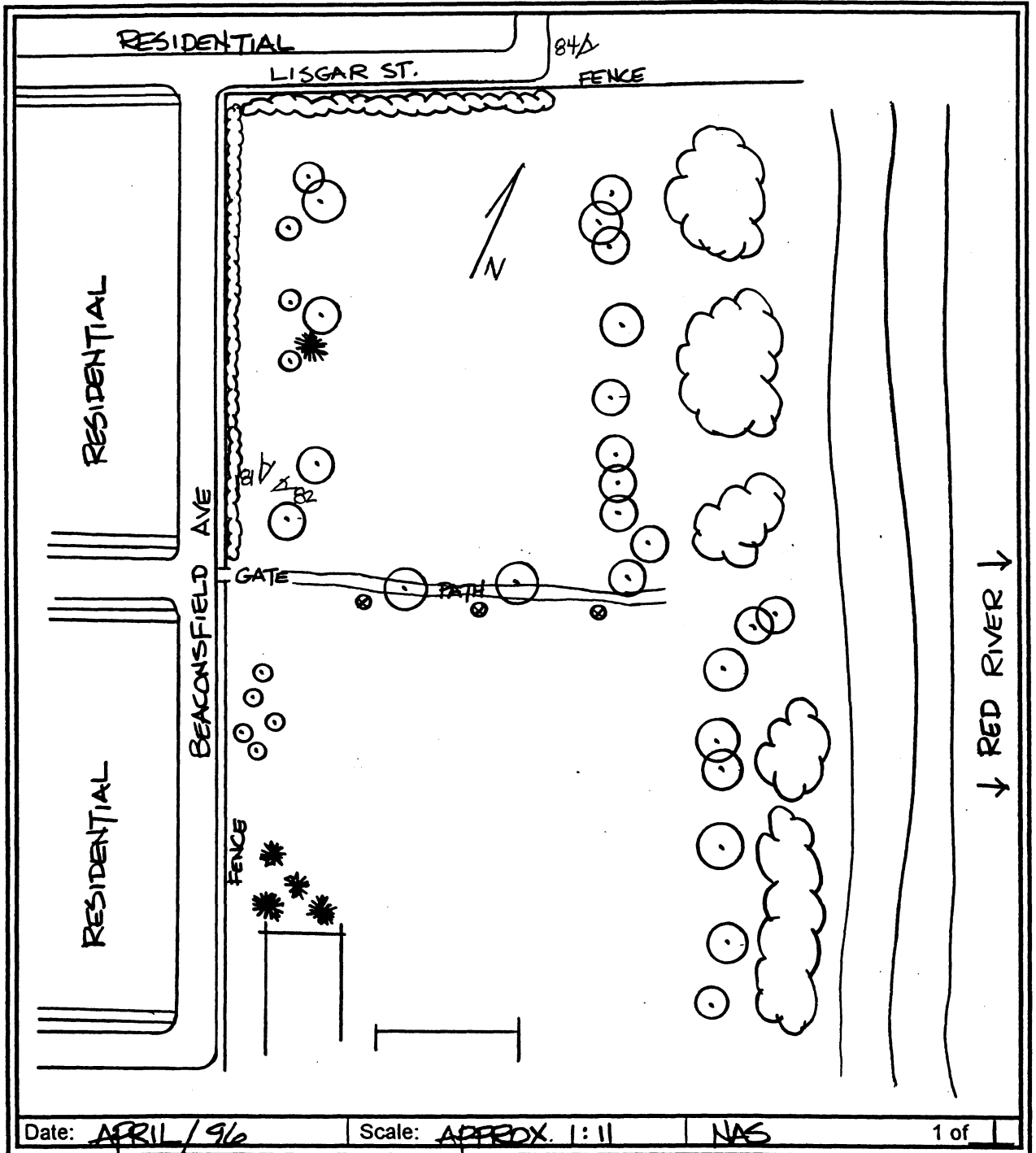
Site #: 31 Name: BARBER PARK Location: SYNDICATE (39)



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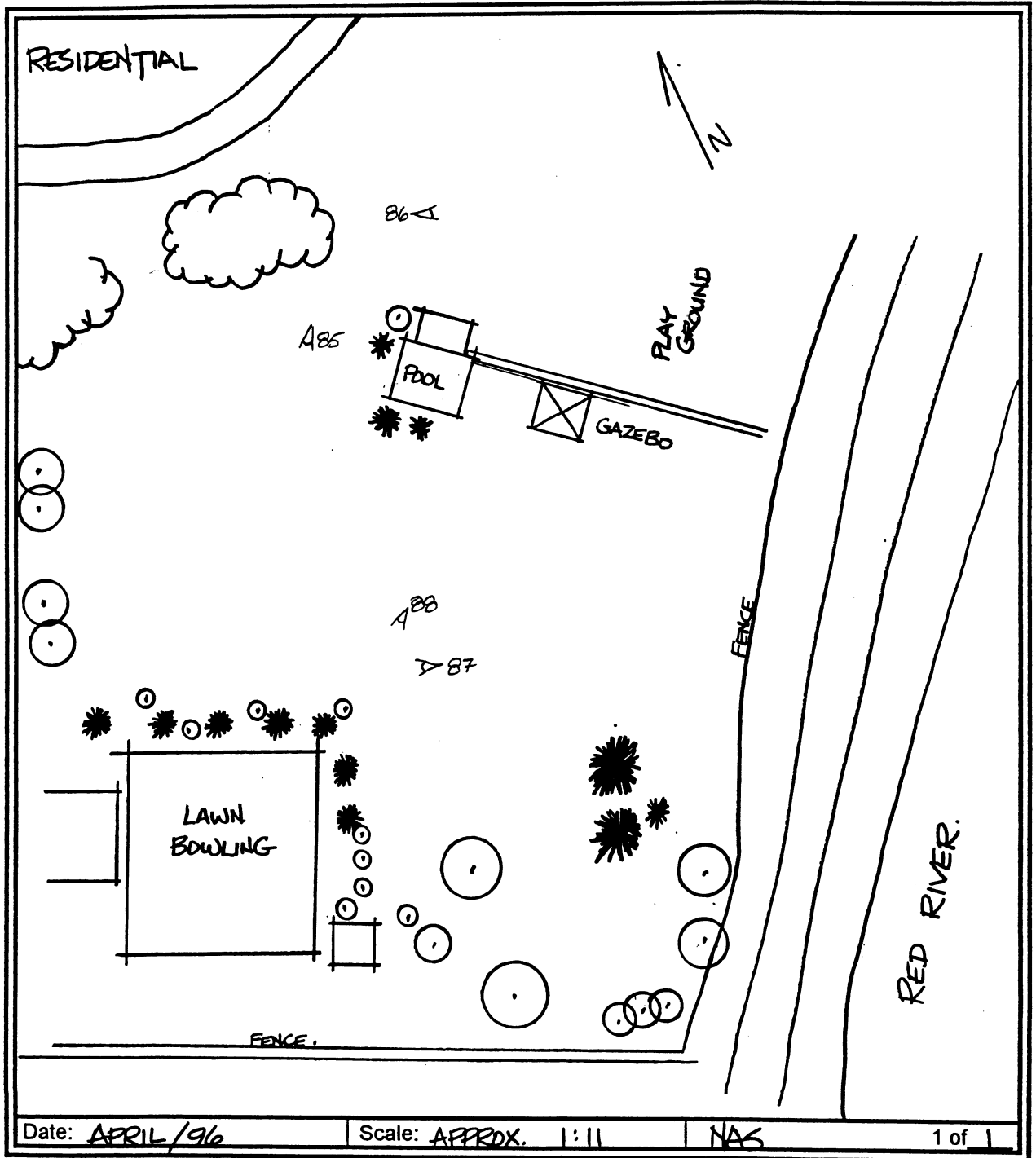
Site #: 32 Name: NORQUAY C.C. Location: SELKIRK (3/2).



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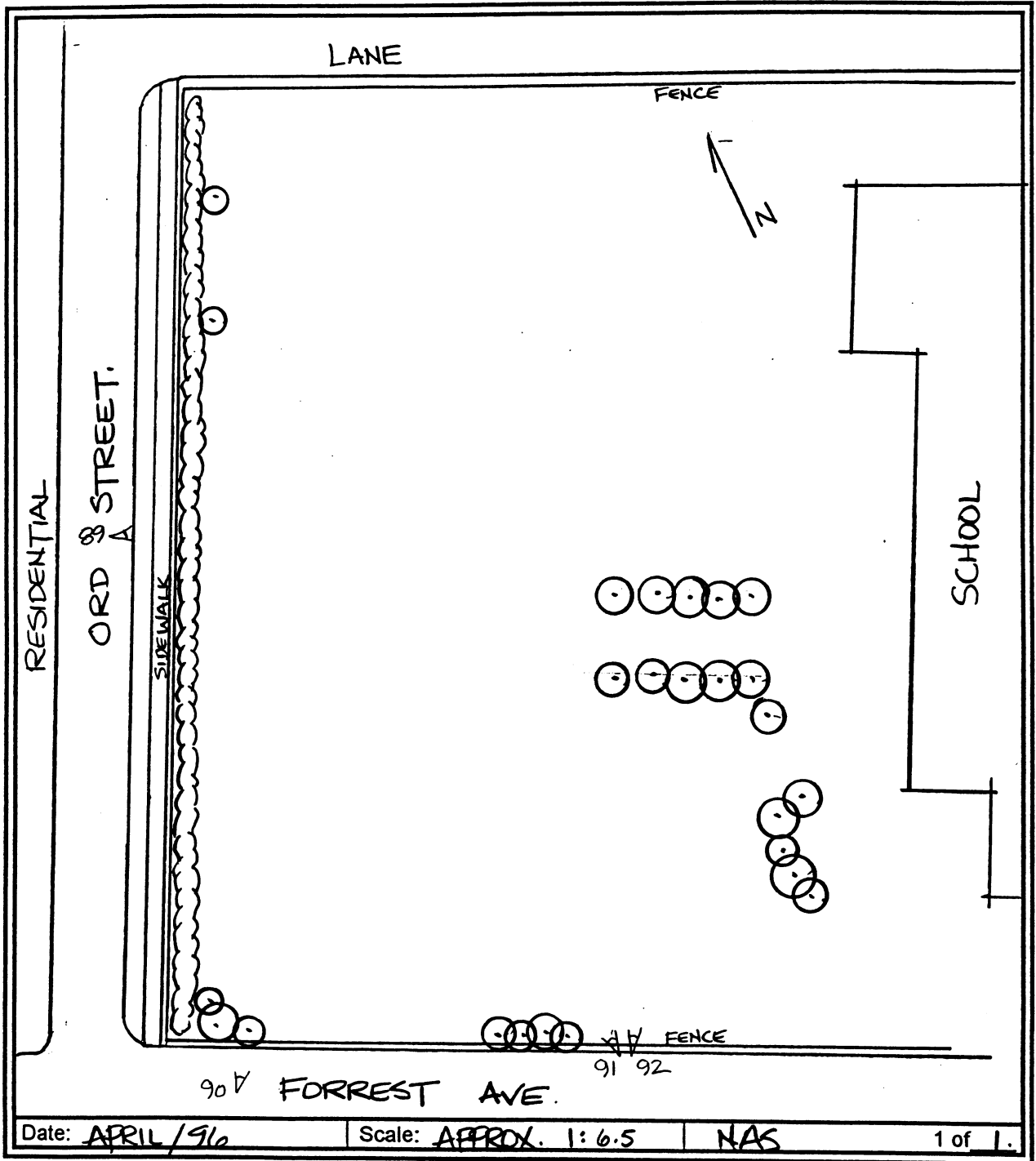
Site #: 33 Name: ST. JOHN'S PARK Location: ST. JOHN'S (37)



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Site #: 34 Name: MARYMOUND SCHOOL Location: NEWTON (30)



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Site #: 35 Name: KILDONAN PK SW Location: ARMSTRONG (2)

