

**SACRED LANDSCAPE:
DIVISION AND CONVERGENCE BETWEEN PAST AND PROGRESS**

by

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ABSTRACT

An artifact is a man-made object of historical or cultural interest that endures because it, or the processes that give rise to its existence, is of value to a society. This thesis aims to understand and establish how an artifact translates into architecture. This involves discerning which qualities endure in architecture, which do not, and why.

One artifact that has endured and is of historic and cultural significance to the City of Edmonton is the Rossdale Flats. The site is notable for its long and significant past. Historically the site was used as a sacred gathering place and burial ground for First Nations, dating back eight millennia. It was later settled by European and Metis fur traders. Today, the site exists as an industrial complex that includes the oldest surviving coal-fired power plant in the city.

This thesis proposes a design for the Rossdale Flats that pays homage to its various pasts and usages. It does so in a manner that offers pertinent interpretations to current issues facing the site and region that can also secure Rossdale's place in Edmonton's future as a cultural artifact.

ACKNOWLEDGEMENTS

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Finally, I would like to say thanks to Karen. For the love and sacrifice you demonstrated over the last four years; for putting words into action.

CHAPTER 1: INTRODUCTION

Edmonton, Alberta, is a relatively new city. Its historical traces have not reached far enough for citizens to appropriately distinguish between past and present. As a result, architectural and landscape artifacts are easily dismissed, as new developments displace history in an environment of hasty growth.

In spite of these conditions, a building that has endured and remains important to Edmonton's history is the newly decommissioned Rossdale Power Plant. It is the first coal fired power plant in Edmonton and exists as the only building left from its era (early 20th century modernism¹); it plays an important role in both the city and province's industrial history.² Recent statements by the city government are claiming that operational and maintenance costs may be too expensive to preserve the plant, and that there lacks consensus about what to do with the site.³ Rossdale, then, is a paradox: to some it represents an Edmonton landmark, symbolizing a site shrouded in history. To others, it represents nothing more than an industrial blight in the river valley (and the city's most prominent green belt).

This thesis proposes an alternative plan that protects Rossdale's historic character. It uses the program of 'memorial park' and 'interpretive centre' to best suit the needs of the city, as well as to respect the history of the site. It preserves the site as a cultural landscape and counters what many falsely see as progress - an impulsive replacement of historic artifacts in order to build something new.

This paper will first discuss how Rossdale can remain significant by realizing its future, through a conscious engagement with its historic past. Secondly, it conveys a historical context to the site, which establishes parameters for the new design. Thirdly, this thesis argues the importance of interpreting the site under the cultural landscape paradigm. Finally, it examines elements of the new design, and how they stimulate new interpretations of the Rossdale Flats.

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- 1 David Staples, "Staples: Let's Save Rossdale Power Plant by Letting it Crumble," *The Edmonton Journal*, March 28, 2013. <http://www.edmontonjournal.com/technology/Staples+save+Rossdale+Power+Plant+letting+crumble/8166966/story.html>.
 - 2 Commonwealth Historic Resource Management Limited, *Rossdale Historical Land Use Study* (Edmonton: Planning and Development Department, 2004), 170.
 - 3 CBC News, "City Faces \$87M Cost for Rossdale Renovations," February 11, 2013, <http://www.cbc.ca/news/canada/edmonton/story/2013/02/11/edmonton-rossdale-power-plant-costs.html>.

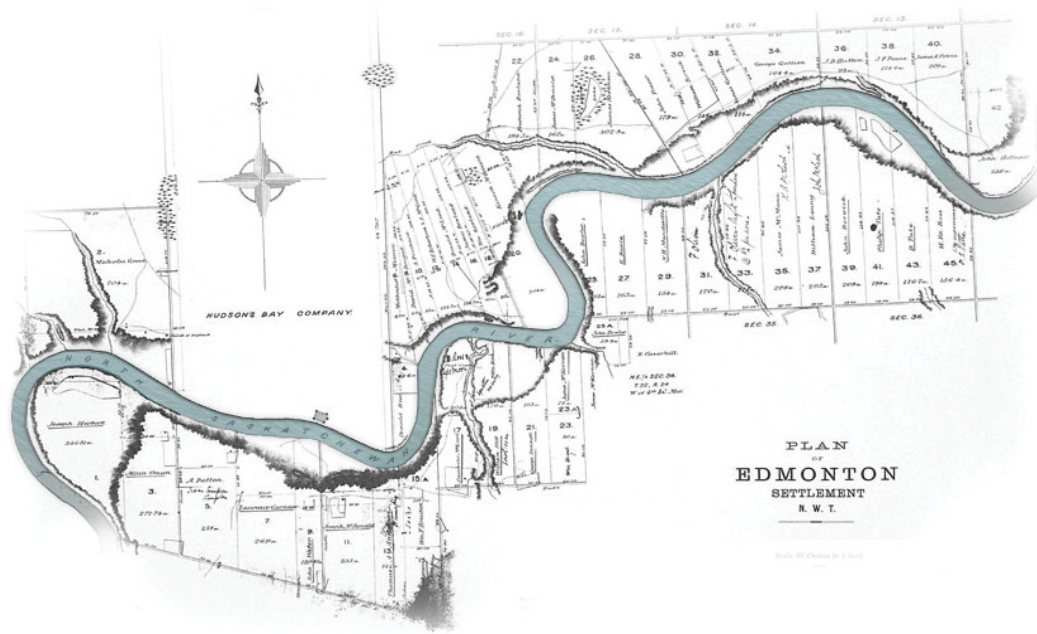


Fig. 1. Plan of Edmonton Settlement, District of Alberta, Circa 1883; from the City of Edmonton Archives.



Fig. 2. Edmonton River Valley and Green Belt with Rosssdale Node, 2013; from Google Maps.

CHAPTER 2: REMAINING SIGNIFICANT

The Rossdale Flats in the Edmonton River Valley is representative of a larger issue of cultural dichotomies, development, and the struggle to find identity in Western Canada. Developers and drivers of economic growth in Alberta tend to simply take history for granted. In fact, the ‘taking for granted’ of historical resources appear to be (ironically) part of a provincial and civic tradition. Rossdale is an example that speaks to Alberta’s tendency to value ‘progress’ over culture. One only needs to consider the impact that Alberta’s oil industry is having on indigenous groups such as the Lubicon Cree and Fort Chipewyan, and the Government’s hesitancy to implement policies that protect these peoples’ traditional way of life.⁴

In Edmonton, the issue of the cultural importance of Rossdale Flats remains contentious, despite the Province’s designation of the power plant as a historic resource. Recent statements by City Council involve the possible demolition of the site due to rising maintenance costs: Mayor Steven Mandel believes it would require an economic “miracle”⁵ to merit a new design for the Rossdale Generating Station. Others, such as Dr. Rod Macleod, argue that the plant, although desirable, is expendable because it represents only a fraction of the site’s history; in short, the generating station should only be considered as a bit player⁶ in something larger and more abstract.

Referring to the power plant as a bit player within a broader history is accurate. However, one cannot simply dismiss it as expendable due to its measure of gravity within a broader framework of time. History is continuous and evolutionary; Rossdale exists as a result of what came before it. In his “Overlapping Cultural Landscapes,” Julian Smith argues that static definitions of heritage resources must realize changing environments. Such static definitions fail to “show the richness created by overlaps, but also the tensions. It makes it obvious that the differences cannot be coalesced into a single homogeneous whole, nor

4 Amnesty International, *From Homeland to Oil Sands: The Impact of Oil and Gas Development on the Lubicon Cree of Canada* (London: Amnesty International, 2010), 4. <http://www.amnesty.ca/sites/default/files/amr200022010enhomelandsoilsands.pdf>.

5 CBC News, “City Faces \$87M Cost for Rossdale Renovations.”

6 Edmonton Journal, “Power Plant Just a Bit Player in Rossdale’s Rich History.”

would one want them to be.⁷

Any new design for the Rossdale Flats, therefore, must be designed as a future landscape. It cannot be restored into a capsule: as a natural sanctuary, or reclaimed only as sacred native land, or transformed into an industrial conservation site. It is a single and greater cultural entity because of all three (and more) of these histories. Each defining moment gives rise to what it looks and feels like, and how it will become relevant today and for future generations. Each moment in time must be thoughtfully considered.



Fig. 3. History and Identities of Rossdale Flats Representation.

7 Julian Smith, "Overlapping Cultural Landscapes: Mediating Heritage Value," (paper presented at Conserving Cultural Landscapes, Roundtable, Canada Research Chair on Built Heritage, Université de Montréal, 10-12 March, 2010), 5. <http://www.willowbank.ca/asset/1624/Julian%20Smith-%20overlapping%20cultural%20landscapes;%20Mediating%20Heritage%20Value.pdf> (accessed June 27, 2013).

CHAPTER 3: HISTORICAL BACKGROUND

The River

The City of Edmonton began on the banks of the North Saskatchewan River. The city's growth is a result of its effectiveness as a trading post. Both the Hudson's Bay Company (HBC) and the Northwest Trading Company (NTW) established lucrative trading forts along this river system. Indeed, the success of their forts relied primarily on river-boats, and in return, "fur trade in western Canada dominated North Saskatchewan River history."⁸

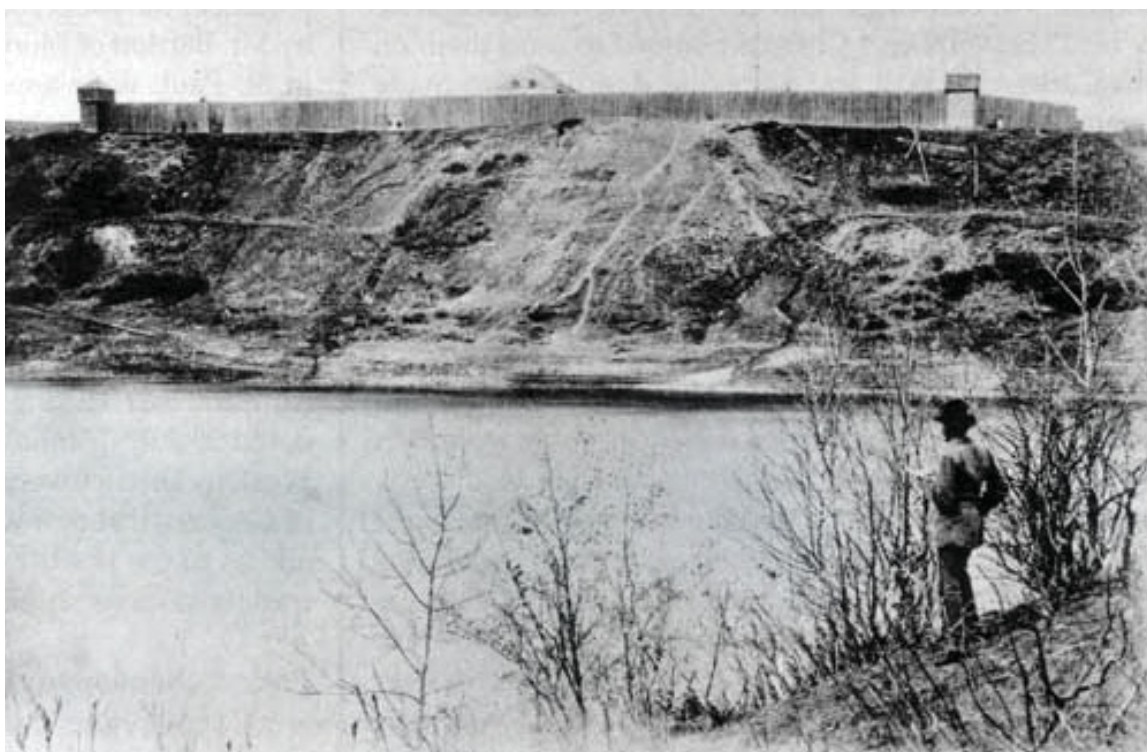


Fig. 4 Edmonton from the southside of the river, 1871; from the City of Edmonton Archives.

The area currently known as the 'Rossdale Flats' was the original location for Edmonton's fur-trade. Understanding the relationship between the Flats and the river is therefore critical for determining the parameters of this thesis.

8 Billie L. Milholland, *Canadian Heritage Rivers System Background Study: North Saskatchewan River* (Edmonton: North Saskatchewan Watershed Alliance, 2005), 32.

For European and Metis trappers, the river valley functioned as an important route for raw goods. Prior to European settlement, the valley was used as hunting grounds for First Nations peoples (Cree, Blackfoot, Assiniboine, and Paleo-Indians). People throughout history have been attracted to the valley as an abundant source of water and a rich source of animals and plants.⁹ Much sought-after trees, such as poplar and aspen, were used as firewood and for pioneer homesteads. The Rossdale Flats in particular contained rich and soft agricultural lands due to river floods every 100 years. The site offered “fishing, farming, hunting (buffalo jumps and pounds); trapping; berry and root gathering, and even pottery production [from pigment clays]”¹⁰ - items required for the settlers’ survival.

The river also provided a natural boundary between First Nations peoples. The river’s depth and swift current placed the Flats in position for political and economic security; Woodlands Cree and Assiniboine trappers were granted safe access to the Fort as it lay north of the southern (and rival) tribe territories. Plains tribes, such as the Blackfoot, frequented the Fort since it was located far enough south and could provide equipment and resources during hunting season.

Thirdly, the river bank is a unique and refreshing spot in a region largely covered by dry low-lying terrain, woodlands, grasslands and fescue. Today, the North Saskatchewan River remains the centerpiece of Edmonton, despite having shed its economic and politically strategic advantages. It still serves as a popular (yet still underused) attraction for sightseers, nature enthusiasts and a source of other recreational activities such as running, fishing, and biking. The valley contains a significant portion of the Trans Canada Trail.

Changing Uses

The Rossdale Flats are named after Don Rossdale, a 19th century settler, land-owner, farmer, and industrialist. These occupational titles associated with Don Rossdale also suggest the many different uses of his property.

By the end of the 1800s, furs began to fall out of fashion in Europe, and the advent of the railroad shifted economic activity from the river valley flats to the higher plateaus on either

9 Ibid.

10 Commonwealth Historic Resource Management Limited, *Rossdale Historical Land Use Study*, 36.

side of it.¹¹ Once the rail line was complete, the river valley, as a strategic transportation corridor and territorial boundary, quickly became a “barrier and no longer an artery.”¹² In addition, Fort Edmonton was taken down and reassembled on higher land after it was severely damaged from a series of floods.¹³ The Flat’s former status as an important trading post was lost, as declining property values caused HBC to gradually parcel off land to the City.

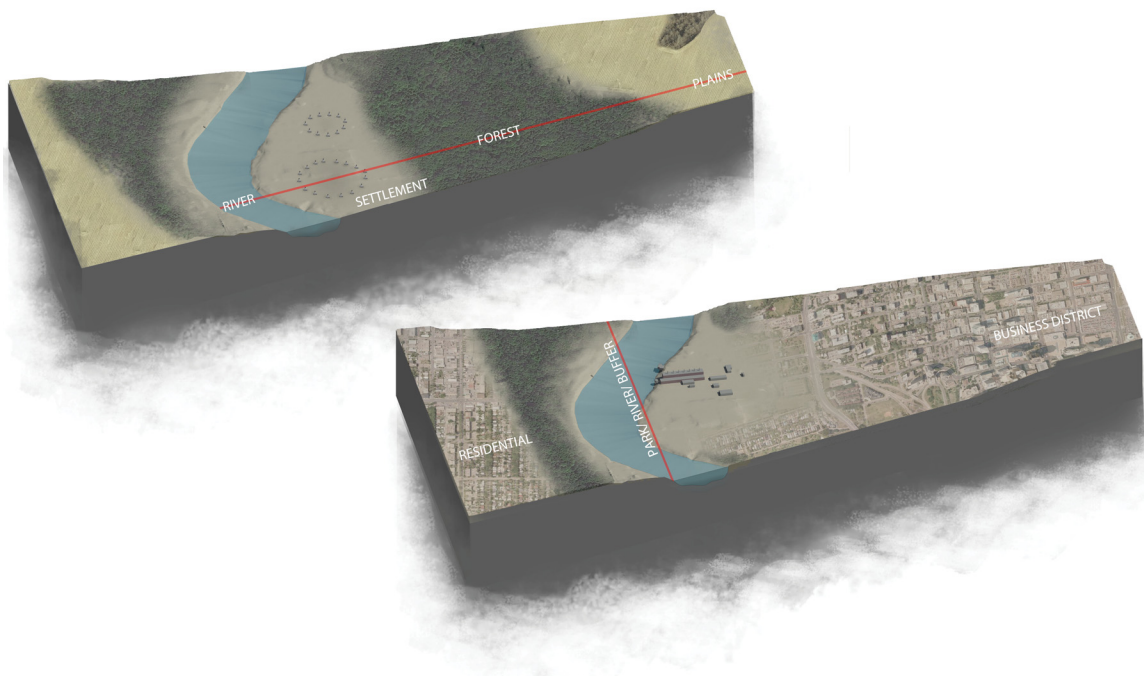


Fig. 5. [Top] Before the railroad as river serves as important trade route, 18th century.

Fig. 6. [Bottom] After the railroad, the city is divided by river valley, 19th century.

Under the City’s direction, a wide variety of facilities were constructed on the Rossdale Flats: “power plant, water treatment plant, gravel pit, roads, railway lines, bridges, and very nearly also a manure depot, an incinerator, and an expressway”¹⁴ All these functions signalled a reconceptualisation of the site from the city’s centre to its periphery. In 1899, the City began using the low-cost land parcels in Rossdale for civic purposes such as parkland and industrial exhibitions.

¹¹ Ibid., 32.

¹² Ibid., 200.

¹³ Ibid., 128.

¹⁴ Ibid., 200.

In 1915, the North Saskatchewan River flooded, and wiped out nearly every existing facility. Organizations and industries, for good reason, did not re-establish on the Flats. Subsequently, the site was considered to be a low-income and ethnically diverse area that “had very little clout in civic decision-making.”¹⁵ Ill feelings persist today, as the City and developers are hesitant to make any meaningful commitments to the area. Plans to develop the area have been devised, but continue to be placed on hold due to a lingering disrepute of the area: as 1) a flood plain, 2) lower-middle income neighbourhood with seemingly low possibility for future development, and 3) mixed feelings regarding the proximity of the Rossdale industrial facilities.

Sacred History

Pre-dating European settlement, the river valley was used as a ‘pehonan’, or gathering place, for indigenous peoples. According to the Rossdale Flats Aboriginal Oral Histories Project Research Team, “participants described how the Flats were the location for sacred ceremonies that included the Goose Dance, Sun Dance, and Pow-Wows” as well an important migration trail named the “Wolf Track.”¹⁶

In the 18th century, Fort Edmonton, as a non-denominational enterprise, designated a common graveyard in the Flats. However, the exact location of the burial grounds is an ongoing topic of debate for various interest groups, including First Nations, the City, the public, and various private interests. The earliest recorded burials date from 1814, but today the exact location is uncertain.¹⁷ Evidence has been erased by transfers of ownership, changing land use, and recurring floods that have washed away grave markers. This has been a particularly distressing process for many First Nations, people who believe their ancestors to be buried on the site.

Skeletal remains and artifacts have been discovered in and around Rossdale, including ancient nomadic Indians and Paleo-Indians predating the written record. Nomads were

15 Ibid., 201.

16 Rossdale Flats Aboriginal Oral Histories Project Research Team, *Rossdale Flats Aboriginal Oral Histories Project Report of Findings* (Edmonton: City of Edmonton, 2004), 2.

17 Commonwealth Historic Resource Management Limited, *Rossdale Historical Land Use Study*, 201.

likely drawn to the river valley for the same reasons as the fur traders¹⁸ and it was likely that their burials would have occurred near their camps as well. Soft alluvial soils from the flood plain offer suitable places to dig graves and form burial mounds for the deceased.

Today it is clear that the ground is considered sacred and is used as such¹⁹. First Nations, such as the Papaschase Band, continue to lay burial crosses and perform dances and rituals on the site's perimeter. The sacred character is important as it sets the tone for the site. In order for the design to appropriately celebrate the site, it must gain understanding of the rituals and beliefs associated with it. This is also a way in which visitors can gain a personal connection or experience with the site, as well as mourn the deceased.

This thesis adopts the concept of memorial park that celebrates the deceased in an hopeful manner based on the concept of the 19th century Scottish landscape and garden designer, J.C. Loudon. Loudon's cemeteries were places that were designed to please and uplift visitors; he believed clean and optimistic memorials are the most respectful way to mourn the dead. In this vein, the proposed design for Rossdale park will be for recreation, exercise, emotional and spiritual uplift, as well as honoring the deceased. That is, a park that "paints [over] the gloomy horrors of the tomb"²⁰, rather than a place that dwells on the sorrow of death.

Recent History

The modern history of the Rossdale Flats encompasses its industrial history, which began in 1902 and spans approximately 100 years. The first industrial enterprise in the Flats was a coal burning power plant that served Edmonton with its first water main and sewers. The plant re-established Rossdale as a player in the City's future. As a result, the facility was expanded in 1930, 1938, and 1954. An adjunct water treatment plant was added in 1947 and later expanded in 1956.

Over its generating life, and even after its decommissioning in 2009, the plant has gener-

18 Ibid.

19 The sacred character of Rossdale is shown through community members repairing site crosses and performing both Christian and First Nations rituals outside site boundaries.

20 James Curl, "John Claudius Loudon and the Garden Cemetery Movement," *Garden History* 11 (1983): 138.

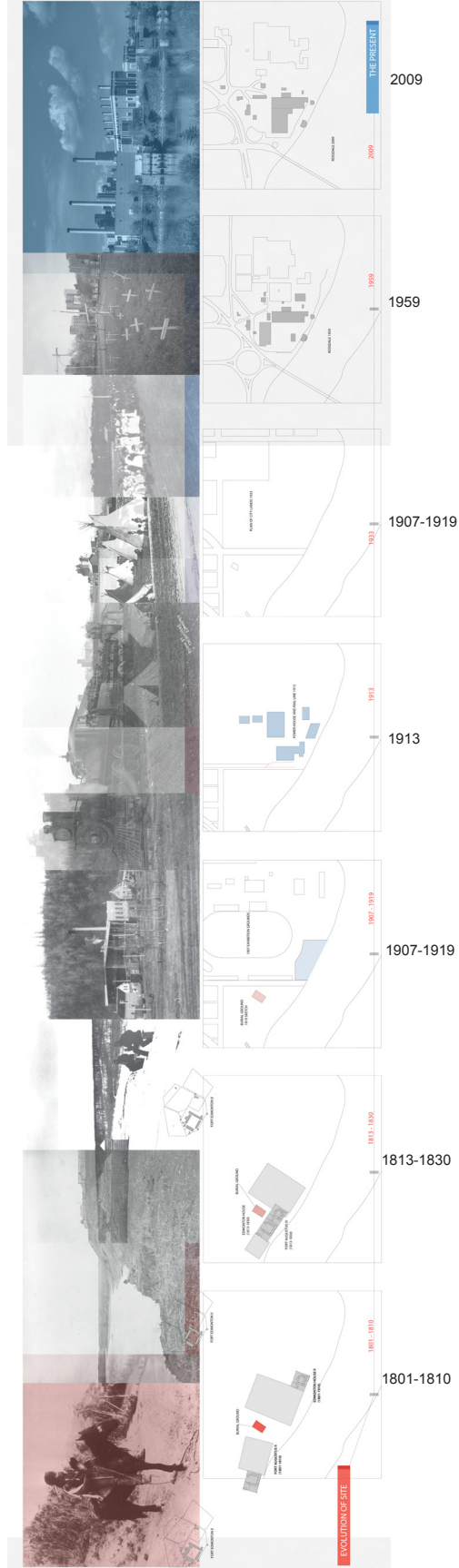


Fig. 7. Timeline of Rosedale; First Nations, Fort Edmonton, Burial Site, and Industrial Facility.

ated controversy. This is due to the following reasons:

Rossdale underwent years of road construction to alleviate increasing traffic volumes in the valley. The Rossdale Historical Land-Use Study describes this process as a reminder that the general public still think of the land as “a barrier akin to the river, something to be got over and through.”²¹ Roads haphazardly severed the low income residential community into North, South, and West Rossdale.²² The division of land created a disintegrated potpourri of various private and public developments, ranging from sports facilities, schools, military training grounds, winter festivals grounds, residential zones, public parks, and industrial grounds. Today, no trace of any historic cemetery remains.

The decommissioned generating station, with its brick patina and tall smoke stacks, remains a conspicuous feature in the North Saskatchewan River Valley. In 2001, the Provincial Government declared the Generating Station (including the Low Power Boiler Room, Turbine Hall, Switch House, Pump House #1, and Administration Building) historically designated resources.²³



Fig. 8. Aerial photo of Rossdale Generating Station, 2009; from Terry Bourque Photography.

21 Ibid, 201.

22 Ibid.

23 Alberta Register of Historic Places, “Rossdale Power Plant,” *Heritage Resources Management Information System* (accessed June 27, 2013), <https://hermis.alberta.ca/ARHP/Details.aspx?DeptID=1&ObjectID=4665-0418>.



Fig. 9. Aerial photo, 1959. City of Edmonton; from the City of Edmonton Archives

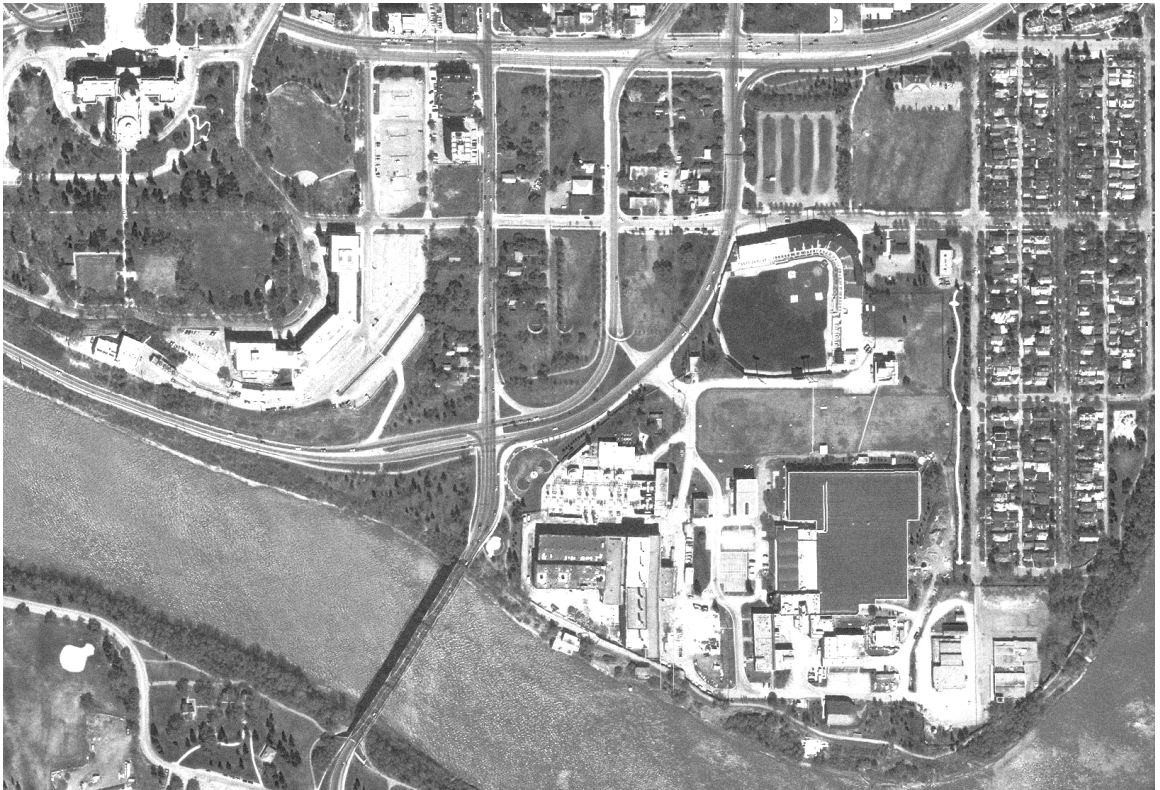


Fig. 10. Aerial photo of Rosedale, 2009; from Terry Bourque Photography.

The end of an era for the Flats was symbolized in 2009, when the Plant was decommissioned and handed over to the City. Public opinion regarding the cultural character of the site remains in dispute. Supporters of the historic designation recognize the industrial facilities as important and unique to Edmonton's development - an urban artifact - although many are calling for the removal of the building's historic designation in order to make way for new developments.²⁴

This thesis is concerned with keeping the plant and many of the associated buildings as part of a historic designation. However, it is not concerned with preserving the site as it existed before. Rather, it is focused on finding ways to make the past relevant today, or in other words, learning from historic artifacts by offering a contemporary interpretation of the past. It understands that today's river valley faces new challenges: different communities and interest parties, a green recreation belt, an expanding downtown, an industrial facility that is no longer in operation, and the ever-present threat of flooding. Making the past relevant within a contemporary context, according to a cultural landscape definition, is the most effective way of ensuring that site has a future. It is to this concept that I now turn.

24 Gordon Kent, "Rossdale Power Plant Could Face Demolition," *The Edmonton Journal*, Feb 9, 2013. <http://www.edmontonjournal.com/news/edmonton/Rossdale+power+plant+could+face+demolition+Mayor+Stephen/7939143/story.html>.

CHAPTER 4: CULTURAL LANDSCAPE

The importance of the Rossdale site can be assessed through various lenses, such as its heritage, history, legends and myths, aesthetics, ecosystems, property values, types of uses, and so on. But for this thesis, the site is a cultural landscape. This is different from the normative method of assessing historic value: heritage. I will define these concepts in the following section.

According Daniel Francis' *National Dreams*, heritage is desirable as it provides "an opportunity to unite people through a common understanding of their past."²⁵ Heritage provides a foundational framework for progress, be it political, social, or architectural. A group feels united through a common understanding of what makes them unique. For instance, the pioneer, the cowboy, and the libertarian, are all considered quintessentially "Albertan" traits. However, beliefs of what a heritage is can be embellished as much through myth as historical proof. In attempting to foster a sense of pride and unity, some historical facts are omitted, while others are asserted as typical. The process of determining a heritage are often based on lofty ideas of what it should be, rather than what it actually is. The process is not democratic, and many voices and factors can be left out.

A view that draws parallels to heritage is that of Pierre Nora and *a lieu de mémoire* (sites of memory). These are connections made from material and immaterial things that become symbolic of a community. Entities such as the historic power plant, monuments and memorials, unique features in topography and the natural environment can help make places meaningful to those outside its living memory. It can be considered similar to heritage because, as Nora believed, sites of memory can be deliberate and exclusive, susceptible to "a replaceable imagination."²⁶ However, where site memory and heritage diverge is on the intent of time marks. Instead of choosing certain cultural elements at the exclusion of others in order to fit an ideal, site memory is a will to remember an entity that contains the most essential elements for past and present societies. Special features on the Rossdale

25 Daniel Francis, *National Dreams: Myth, Memory and Canadian History* (Vancouver: Arsenal Pulp Press, 1997), 106, quoted in Victoria Anne De Villars Jones, "A Usable Past: the Alberta Government's Use of Heritage During Times of Celebration" (MA Thesis, Dalhousie University, 2012), 13.

26 Pierre Nora, *Between Memory and History, Les Lieux de Mémoire* (University of California Press, 1989), 8.

site in this way become meaningful and authentic expressions of prospective memory rather than a deliberate fabrication of heritage.

A cultural landscape functions at a basic and visceral level. According to Donald L. Hardesty, a cultural landscape is not restricted to consensus but should rather be individualized and understood through personal connection; an abstract concept that requires an artistic (and subjective) perspective. Therefore, effective cultural landscapes do not come from preconceived notions of heritage. In Hardesty's words, "a knowledge bearer, viewing a rock or a spring, a hill or ruined structure (for the first time) makes a previously unmade connection, recognizes a characteristic that matches some template in the mind, that enables him or her to connect the place with a tradition, a practice, a belief, a piece of the group's cultural history."²⁷ A genuine connection with the site is therefore based on direct experience and authenticity. Through preserving, emphasizing, and re-adapting existing architecture, memorials, and landforms this thesis aims to produce an authentic site memory that appeals to visitors' subjective conscious.

This thesis, therefore, proposes that the Rossdale Flats should be approached in two ways:

1. A cohesive and inclusive interpretation of the site and its various historical threads. Balancing what is shared and talked about together against what is understood individually.
2. The ability to create a direct experience grounded in something new, yet authentic to the its time, history, location, and cultural context.

I will now proceed with outlining the design of the thesis.

²⁷ Donald L. Hardesty, "Ethnographic Landscapes: Transforming Nature Into Culture," in *Preserving Cultural Landscapes in America*, ed. Arnold R. Alanen and Robert Z. Melnick (Baltimore: Johns Hopkins University Press, 2000), 173.



Fig. 11. Rosedale Site Plan

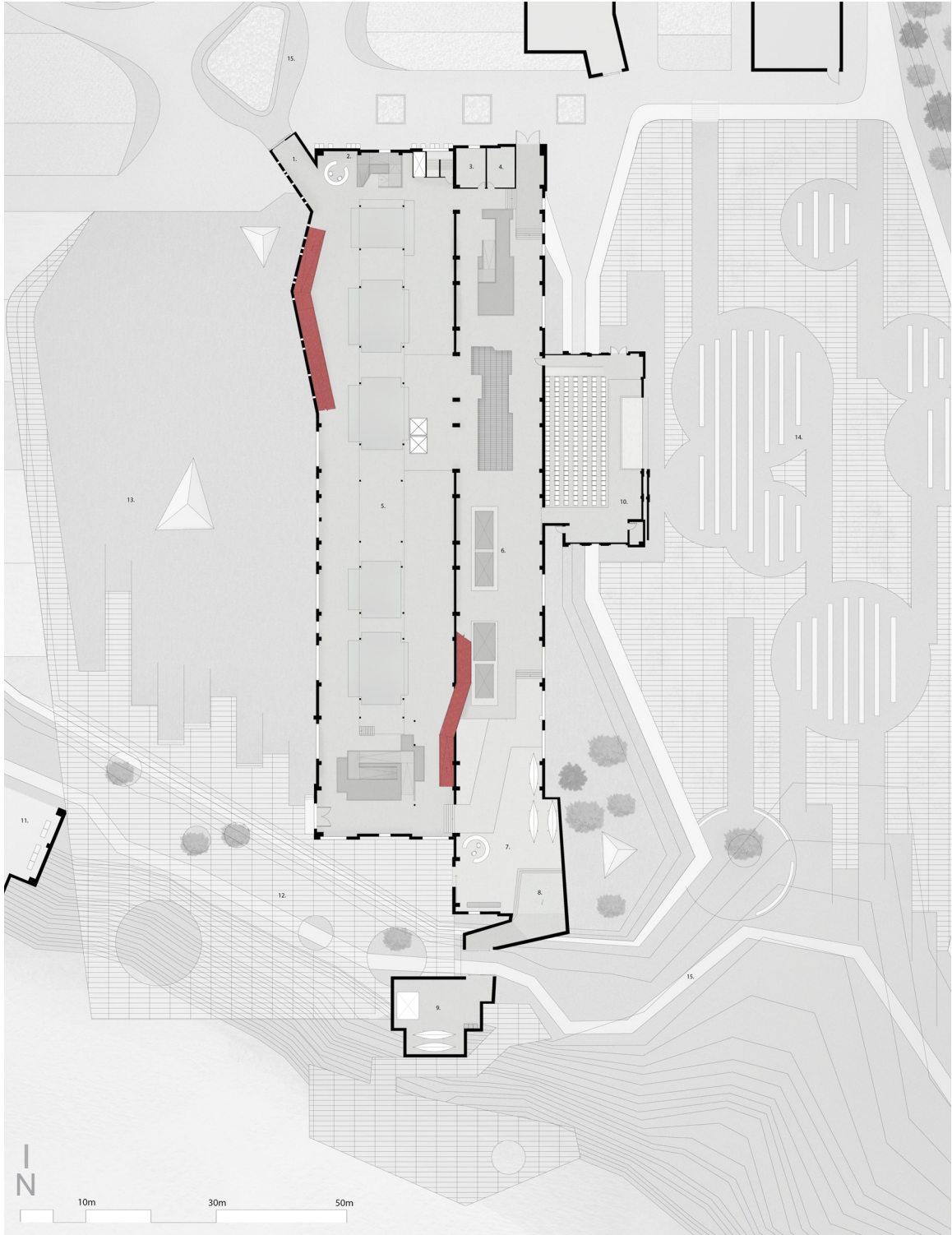


Fig. 12. Main Floor and Surrounding Area Plan.

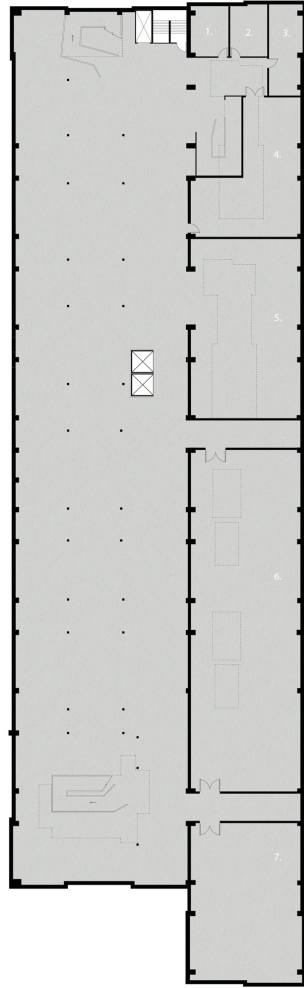


Fig. 13. Basement Floor Plan.

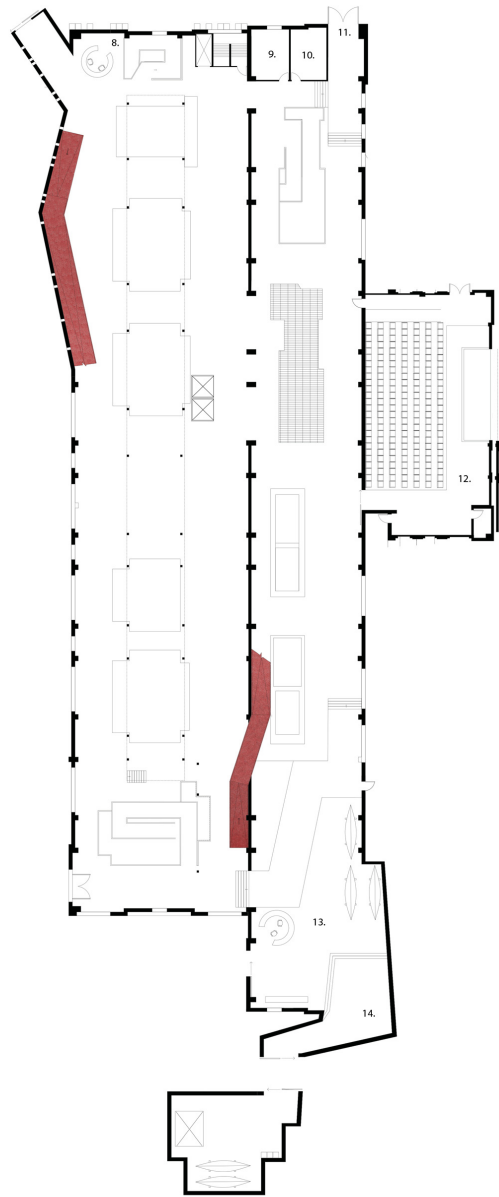


Fig. 14. Main Floor Plan.

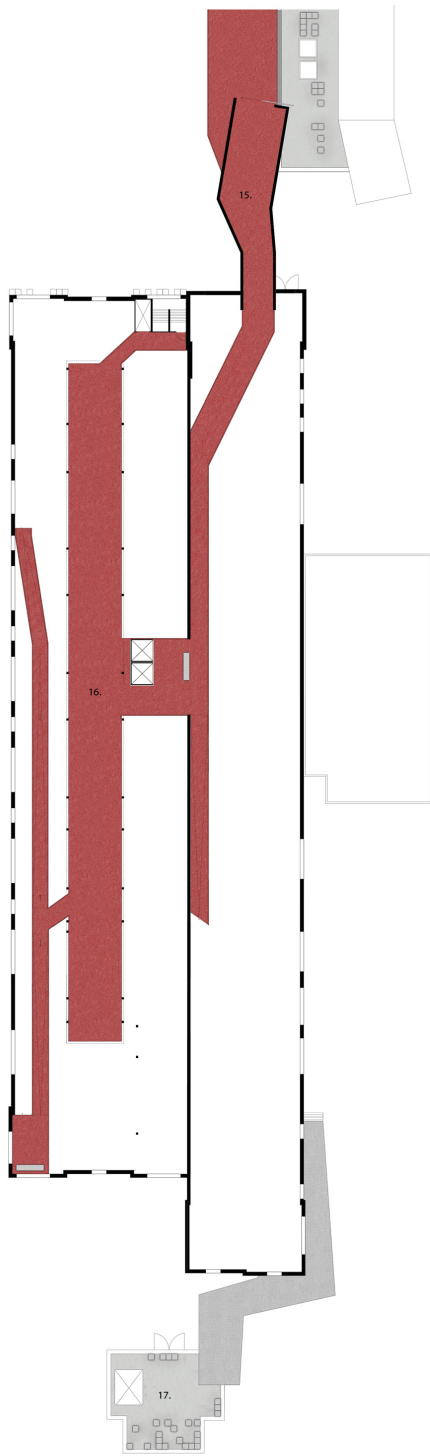


Fig. 15. Second Floor Plan.

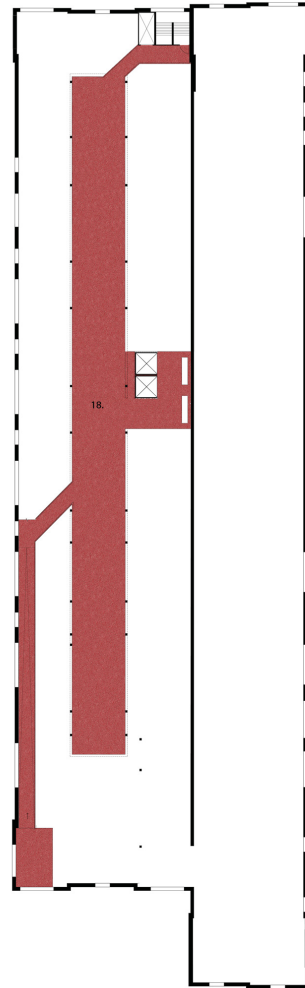


Fig. 16. Third Floor Plan.

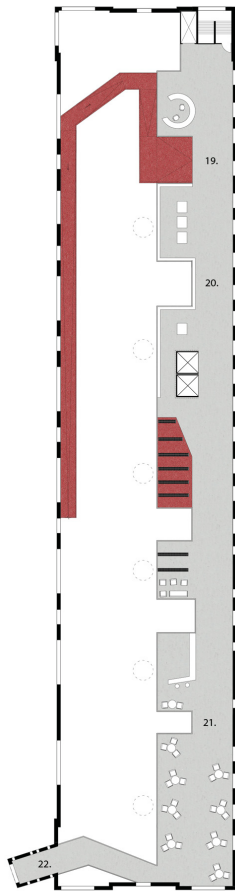


Fig. 17. Observatory Floor Plan.



Fig. 18. Site Section.

CHAPTER 5: LEARNING THROUGH INTERPRETING [DESIGN]

Urbanism

Rossdale Park aims to balance nature and the river valley with an encroaching downtown. Therefore, a testament to the design will be its effectiveness as a buffer between built and natural environments, as well as its ability to draw visitors from both domains.

1) Red bridges serve as a link between urban and natural conditions. The bridges function as extensions of the downtown that penetrate into the site. The red pigment represents the First Nations concept of 'red road' and the correct path in the medicine wheel.²⁸ Conversely, river embankments and channels start from the river's edge ('nature's side') and extend north. Channels help direct flooding as well as provide circulation into the site from the river valley trails.

2) The property grid is extruded from northern city blocks onto the site. The grid is transformed into planters for regional flowers, as well as generates new pathways and site circulation. The grid is applied throughout the site, with the exception of the woodlands, which is to be kept arbitrary.

3) A third buffer detail is the 'night garden'. It has a distinct alternative and urban ambience, serving as an entry point for the park. It also functions as a connecting hub that links the greater park to the south bank of the river (by use of walking bridge). The night garden includes the underpass pavilion (below Rossdale Road). A canteen underneath the road provides quick meals and beverages to visitors and weary trail-users.

The urban garden contains a red asphalt ground treatment, thus creating a visual connection to the red bridges in the greater park. Concrete masses situated around the memorial and Sun Dance circle symbolize First Nations burial mounds. These mounds are extended

²⁸ According to Joseph P. Gone, the Red Road is a mystical concept depicting the customary indigenous process, and the native way of life. It is also symbolized in the Medicine Wheel which uses colours, animals and plants to represent a mystical direction in life, and an interconnectedness to each other, to the animals, and to Mother Earth. Gone, Joseph P. *The Pisimweyapiy Counselling Centre: Paving the Red Road to Wellness in Northern Manitoba* (Ottawa: Aboriginal Healing Foundation, 2008), 134.

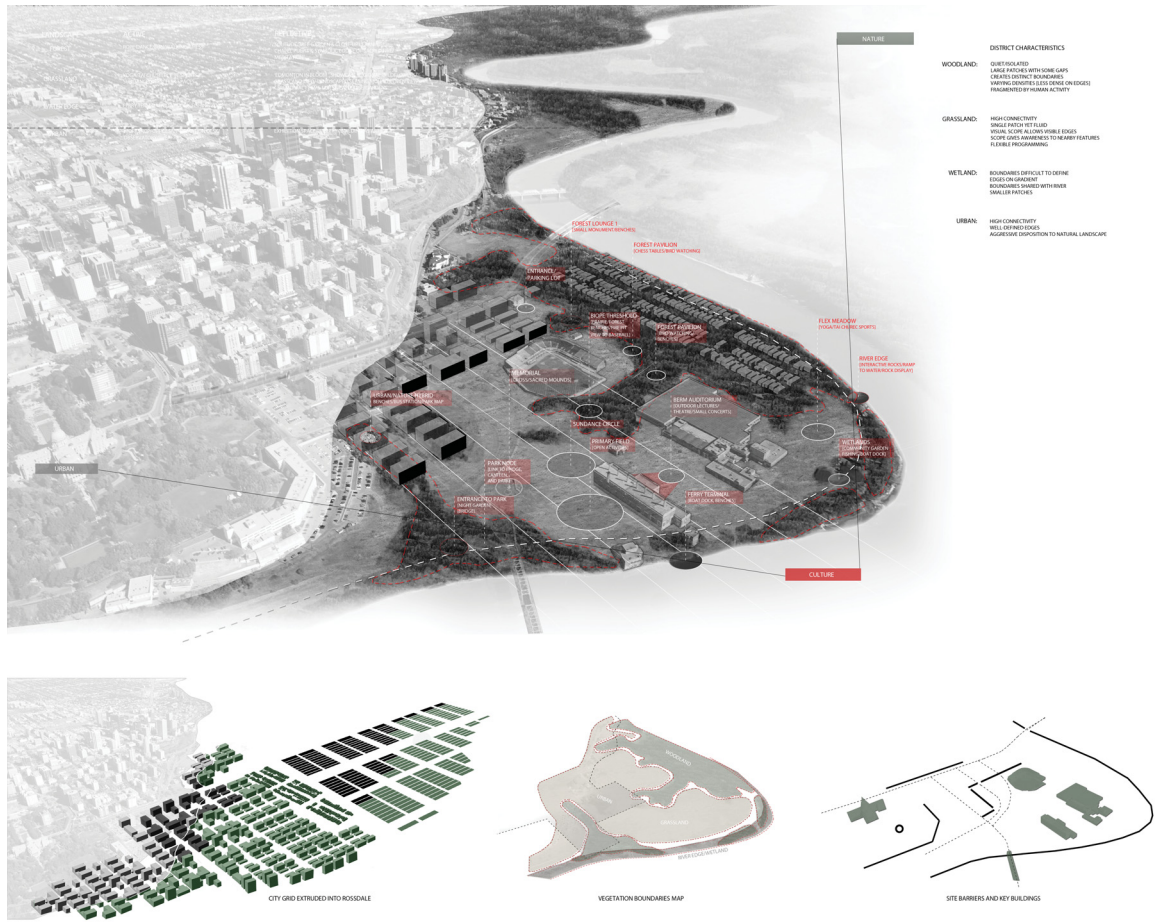


Fig. 19. Diagram of City Grid Expansion, Natural Regions, and Site Barriers.

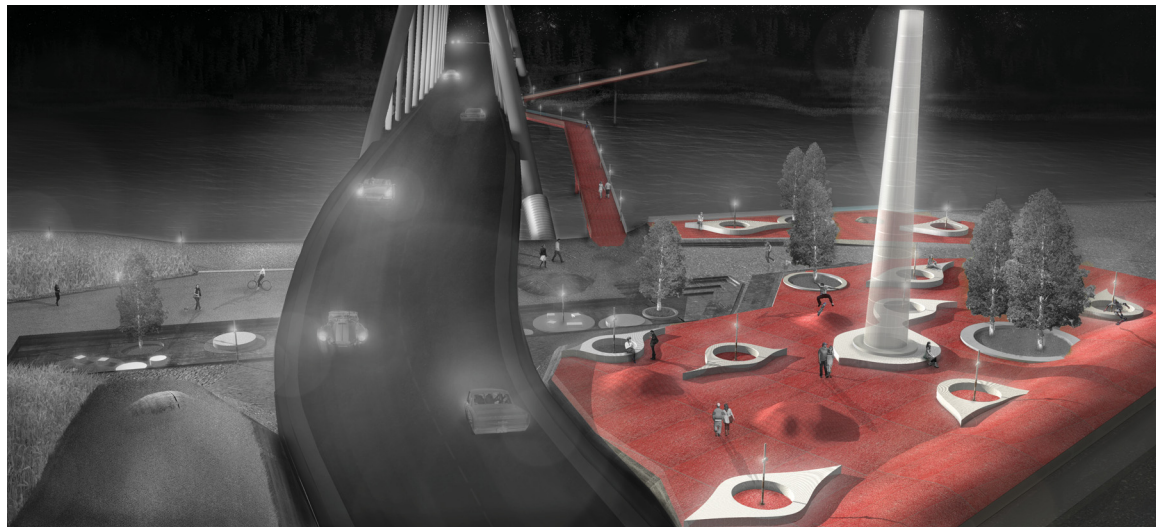


Fig. 20. Perspective of the Urban Garden Including Underpass Pavilion, Bridge, and Light Tower.

into to the urban garden and transformed into red asphalt 'recreational mounds' - helping to create the ambiance of an 'urban park'. The urban garden also includes a 10 metre tall perforated smoke tower (a tribute to the smoke stacks belonging to the high power boilers that were removed in 2009) that serve as a park beacon and counter point to the existing smoke stacks on the power plant.

Sanctuary in the City

While a fundamental part of this thesis is concerned with reviving the natural landscape, it is not concerned with a complete return to a 'natural state'. Rather, it takes the view that ecological history, similar to human history, is constantly in flux; in other words, a completely natural state rarely, if ever, exists. The histories belonging to this site, including ecological history, are understood through contemporary values: sustainability, spatial connection, and coexistence. Nature is reclaimed only to the extent that it sustainably interacts with other site features and generates human value. It preserves "unique [characteristics] and processes while maintaining basic structures, composition, and function."²⁹

Rossdale will gain value is by embracing its distinct location on the river as a partial sanctuary between city and nature. As Hans Lorzing states, "natural and landscape elements are essential [for a successful green space] since they are charged with connotations that the visitor misses in the rest of the urban fabric."³⁰ The character of Rossdale Park will hinge on its repeated combination of natural and man-made features, as well as its use of historic, re-adaptive, and added features. The hybrid between urban and nature provides a soft edge: a gradual transition that eases visitors from the downtown and surrounding residential neighbourhoods to Edmonton's most distinctive key attraction: the North Saskatchewan River Valley.

Aggressive urbanization and industrialization of the Rossdale Flats has damaged its rich diversity of vegetation.³¹ In order to restore a balance between both city and green belt,

²⁹ Idaho Forest Products Commission, "What is a Healthy Forest?" <http://www.idahoforests.org/health1.htm> (accessed June 27, 2013).

³⁰ Hans Lorzing, "Design of Urban Open Space: Bringing a Piece of Landscape into the City" (paper presented at ECLAS Presentation, Vienna, September 17-20, 1998), 13.

³¹ Ibid.

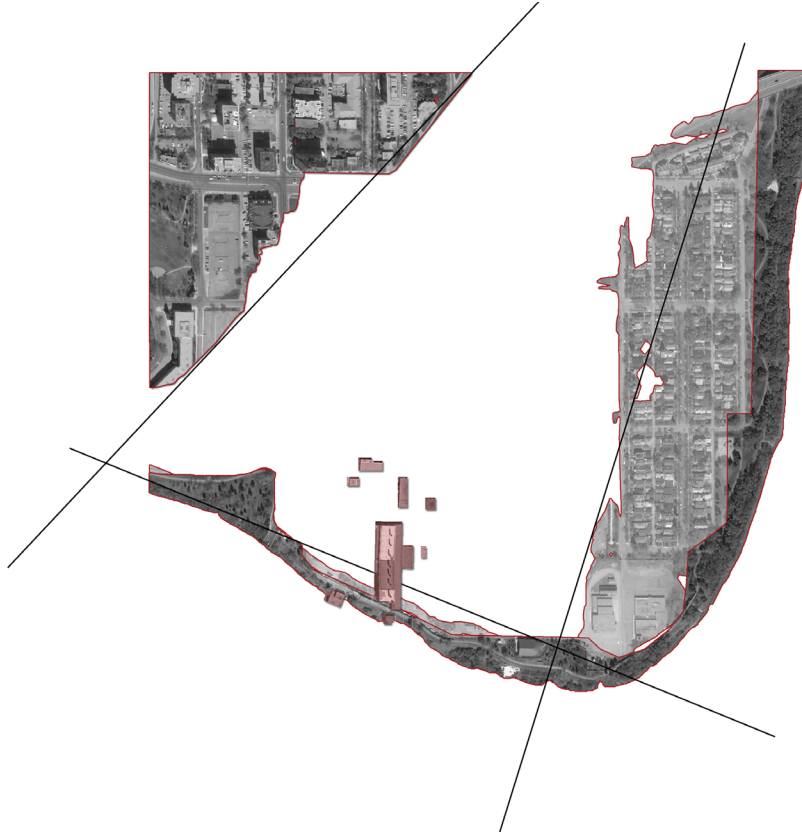


Fig. 21. Diagram of Rossdale Acting as a Buffer Zone Between the Downtown Core (North), Residential Neighbourhood (East), and the Green Belt (South).

it is necessary to create a sustainable framework between the two.³² This is provided by pathways and manipulated landforms that help blur the lines between city and nature.

Dutch architect and planner Sybrand P. Tjallingii claims that when connecting natural elements in an urban environment, extension is more critical than size.³³ A large park will not connect with the urban framework if it does not physically reach into other elements the city. Rossdale delivers 'reach' through its red bridges - starting in an urban setting and extending towards the river's edge - as well as a river bridge that allows walking access from the other side of the river, and utilization of the green space on the west side of Rossdale Road. The site also functions as a node in the Trans-Canada Trail which taps into trail users and city residents that line the North Saskatchewan River Valley.

³² Ibid., 14.

³³ Ibid., 13.

A third way to provide Rossdale with value is by giving visitors a chance to engage with the site. Planters are organized in a way that symbolize the site's agricultural past, combining ideas about historic cultivation as well as knowledge about local plants and gardening. Rossdale has a history of agriculture dating back to Edmonton House in 1801³⁴ and visitors and community members can take part in this history through the use community gardens. Traditionally, the land was used to grow potatoes, turnips, barley and cabbage, as these were the staples of the time.³⁵ Today, residents will be encouraged to grow anything they believe will be useful to their community. Markets can also be set up in the parking lot, on the north edge of the site. The opportunity to fish is provided by river boardwalks that cling to the river edge. These are also locations where canoes and small river boats can dock.



Fig. 22. Site Plan, Including the Community Garden and Boardwalk.

34 Commonwealth Historic Resource Management Limited, Rossdale Historical Land Use Study, 62.

35 Ibid.

Indigenous Elements

Plains Indian Tribes place a heavy emphasis on the art of storytelling.³⁶ This thesis recognizes the significance of storytelling through providing a variety of social gathering spaces, such as park pavilions and clearings designed for members of the community to congregate, organize, and tell each other stories. The site design encompasses large scale, public venues and smaller, more private pavilions. The public venues include a Sun Dance Circle, an excavation that doubles as an amphitheater, open fields, and an exhibition hall. Smaller gathering spaces include an outdoor gallery, forest pavilions, urban gardens, roof-top gardens, a memorial, and river boardwalks.

The Sun Dance Circle is a significant design feature (see Fig. 23). Currently, gatherings or ‘mini Sun Dances’ take place outside the site’s boundaries, as well as other rituals to pay homage to deceased ancestors. The circle is considered to be the “holiest religious structure built by most of the twenty or so major Plains Indian tribes,”³⁷ and it is to be a key component of the project: highly visible, accessible, public, and capable of accommodating large gatherings of people.

Another ritual utilized by nearly every plains tribe is the purification lodge, or sweat lodge.³⁸ The design includes a sacred fire pit near the primary entrance to the park. It represents the flames of the sweat lodge custom, and symbolizes a new spiritual beginning. Heated rocks from the pit can be brought to a woodland clearing, reserved for the occasional erection of a sweat lodge.

Sacred Elements

In addition to the Sun Dance and the symbolic flame, a third sacred feature is the memorial cross. The cross currently exists on the site, but fails to create a space that de-

36 Storytelling was and remains an important element in native arts and culture, due to what Robin Ridington calls “singing them now”: keeping oral traditions new and re-inventive. Rather than being canonical, stories and histories are re-interpreted by “[living] in a succession of creations and re-creations ... they live in the breath of their tellers”. Robin Ridington, “When You Sing It Now, Just Like New,” *Anthropology and Humanism* 36 (2011), 18-24.

37 Peter Nabokov and Robert Easton, *Native American Architecture* (New York: Oxford University Press, 1989), 168.

38 Ibid.,171.



Fig. 23. Site Plan, Including the Sun Dance Circle and Memorial Cross.



Fig. 24. Memorial Cross with Symbolic Burial Mounds.

Hierarchy of Historical Buildings

The Rosedale Flats consists of many buildings: power plant, water treatment plant, administration buildings, and a number of smaller buildings associated with these primary structures. The design must tie these buildings together in a formally clean and symbolically meaningful way. To this end, the buildings are ranked by importance, presence, and historic value. This hierarchy is instrumental in determining which building should be 1) left untouched, 2) turned into ruin, or 3) adaptively reused.

Small buildings belonging to the water treatment plant remain in use. Small (and non-historical) buildings belonging to the generating station are adapted to serve as outdoor enclosures and seating areas. Buildings considered “key” due to their historic character or size (including the main water treatment plant building and the generating station) underwent adaptive reuse. The generating station is repurposed as a museum and the roof of the water treatment building serves as a rooftop garden connected by walking paths. (The function of the building remains unaltered).



Fig. 25. Building Hierarchy for Maintaining, Demolition, and Adaptive Re-use

A similar logic is used on the landscape, dividing it into garden parcels reflecting the city grid and providing a sense of Euclidean order.³⁹ Property lines establish boundaries between different flora and walking paths.

Everything in the park is connected through natural and artificial pathways. Red bridges that connect the power plant, the water treatment plant, and Telus Field, serve as constructed impositions on nature which make it more convenient and 'clean' for access. The 'natural' pathways are more circuitous. Visitors can choose between natural and architectural pathways in the park.

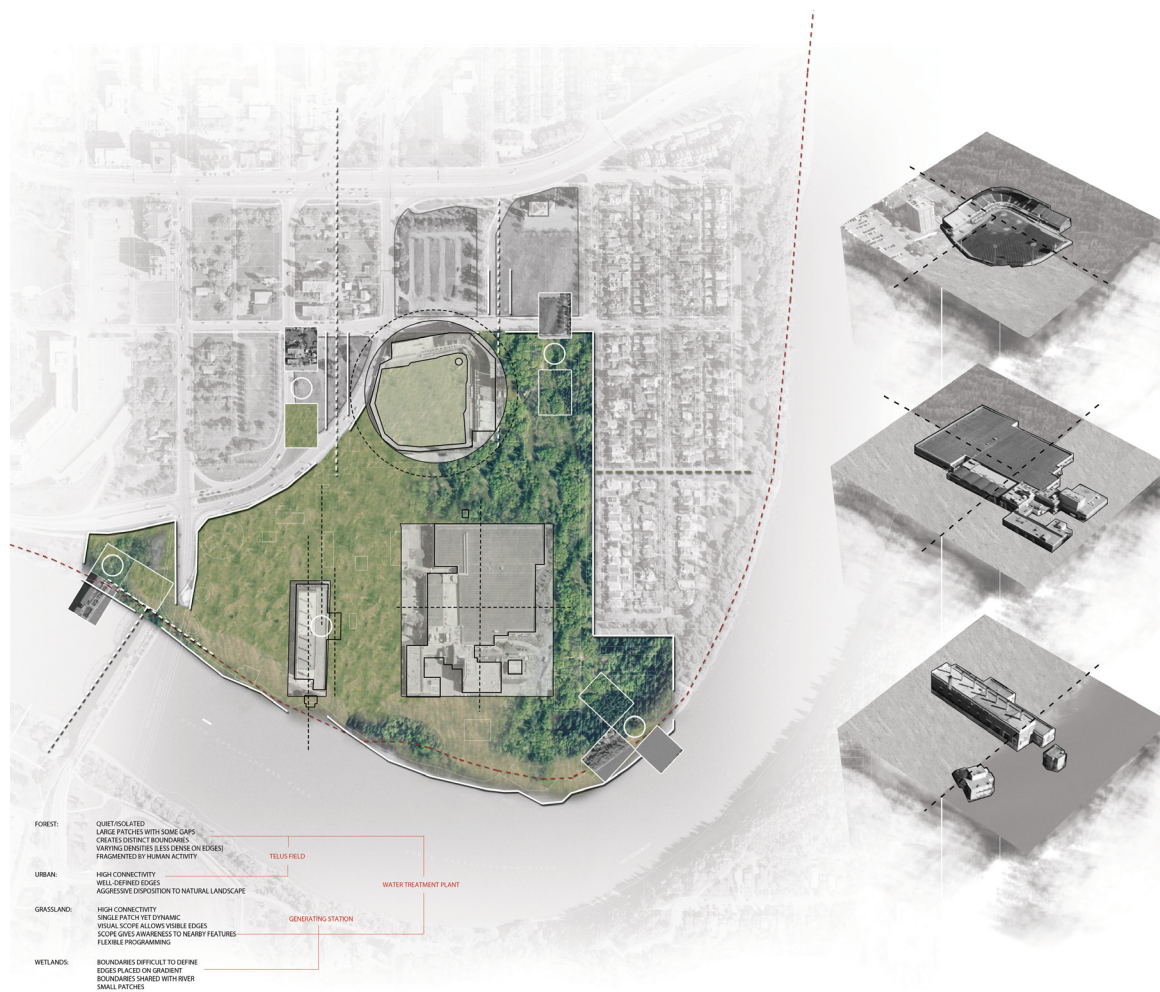


Fig. 26. Diagram of Existing Key Buildings and how they Relate to the Environment.

³⁹ Euclidean geometry was first introduced by the colonists in the 19th century, and I believe it is important to maintain this connection with the past.

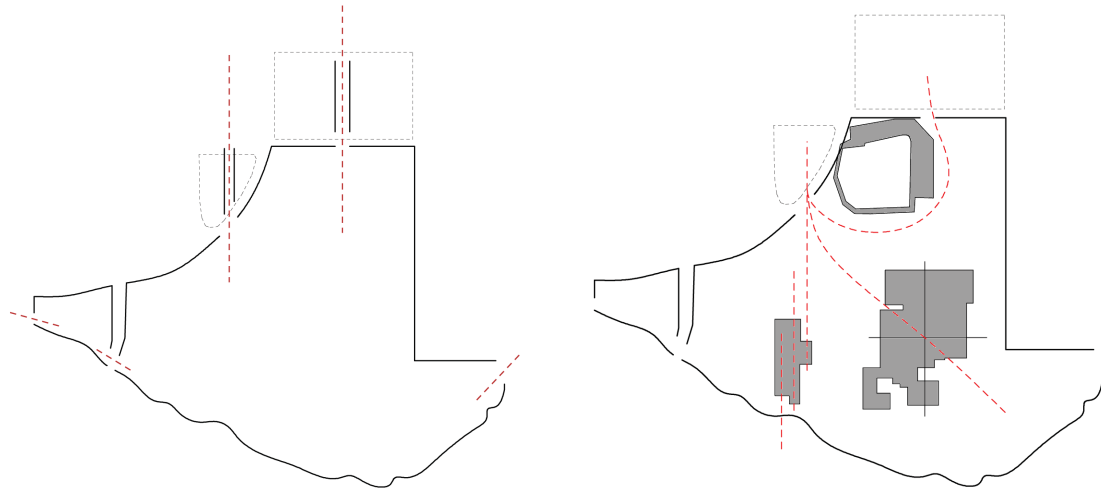


Fig. 27. Diagram of Existing Key Buildings and How They Influence Circulation on Site.

An Object of Reflection: Museum and Interpretive Centre

The power plant is the most significant building in the Rossdale Flats. It is also the primary building designated for adaptive reuse under this proposal. This thesis proposes that it undergo a change in use to highlight the building's history and site context. It will function as museum and interpretive centre for regional art and artifacts, in addition to becoming a museum artifact, itself (see fig. 12).

The former boiler room serves as the exhibition hall. Perforated steel cladding is wrapped around the existing boiler's structure to provide enclosure and environmental control for museum pieces. Each floor of the exhibition is connected by ramps that circumnavigate the mesh enclosure. The ramps serve as extensions of the red roads that are outdoors. The first floor of the boiler room functions as a flexible space that holds museum exhibits and is used for larger functions such as luncheons, galas, and public events. The adjacent turbine hall functions as a circulation spine that connects the exhibition room to the lecture theatre. Large events from the exhibition room can spill out into the turbine hall. Thresholds at the entrances also act as extensions of the red roads that circulate through the site. Grey brick is used to highlight these cutting thresholds, and offer contrast to the existing red brick patina.

The structure of the generating station is maintained, since its large open rooms accom-

modate flexible programming without difficulty. As a result, there are minimal changes to structure and defining interior elements. The integrity of the structure and industrial quality of the plant are kept intact so that visitors are aware of the facility's history as an industrial power plant, on an industrial site.

The fourth floor of the exhibition hall contains a gift shop and observatory. The observatory offers bird's-eye views of the North Saskatchewan River.



Fig. 28. Bird's Eye Perspective of the Rosedale Generating Station.

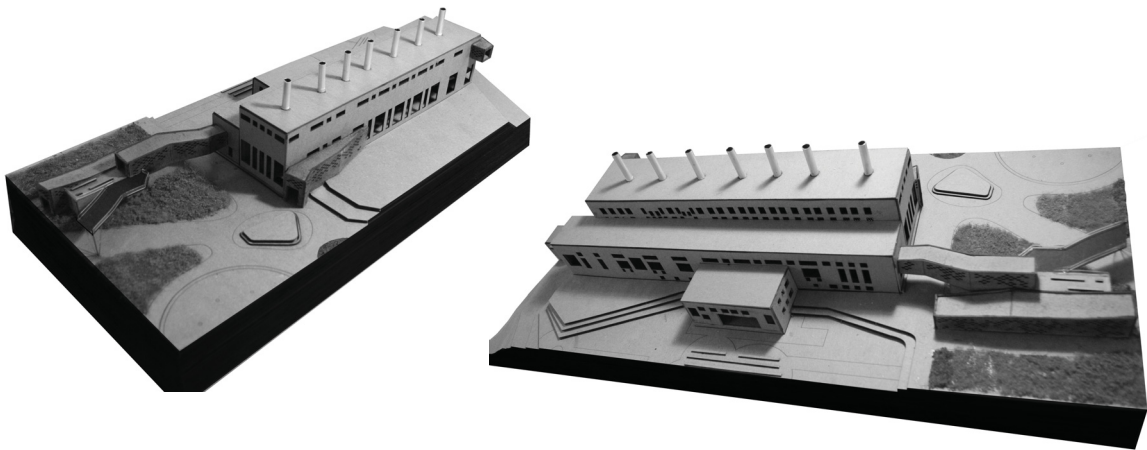


Fig. 29. Model of The Rosedale Generating Station.



Fig. 30. Main Floor of Exhibition Room.

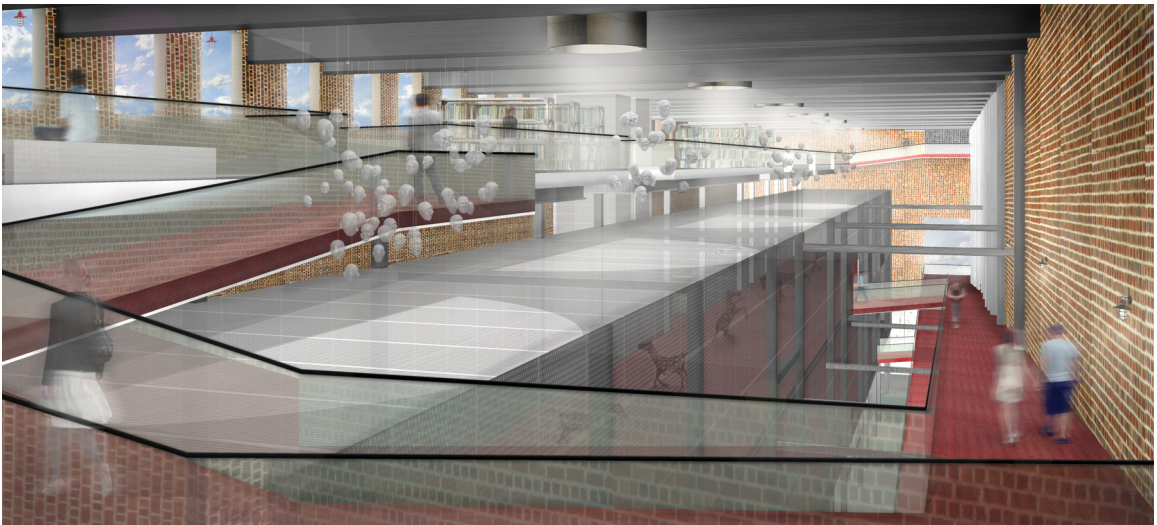


Fig. 31. Observation Floor of the Exhibition Room. Included: Gift Shop and Lounge.

Environmental Design

Since this thesis reconciles industry with the natural environment by interpreting natural and urban phenomena from different perspectives, buildings and structure are designed reveal something inherent about themselves and their coexistence with the natural environment. Conversely, landscape is designed to act upon the existing man-made features to better understand our urban systems. By reintroducing 'natural' conditions back to the site, it places pressure on the urban system to adapt to nature (rather than nature adapting to urban systems). The result becomes a hybrid of natural and man-made elements that coexist and compliment the other.

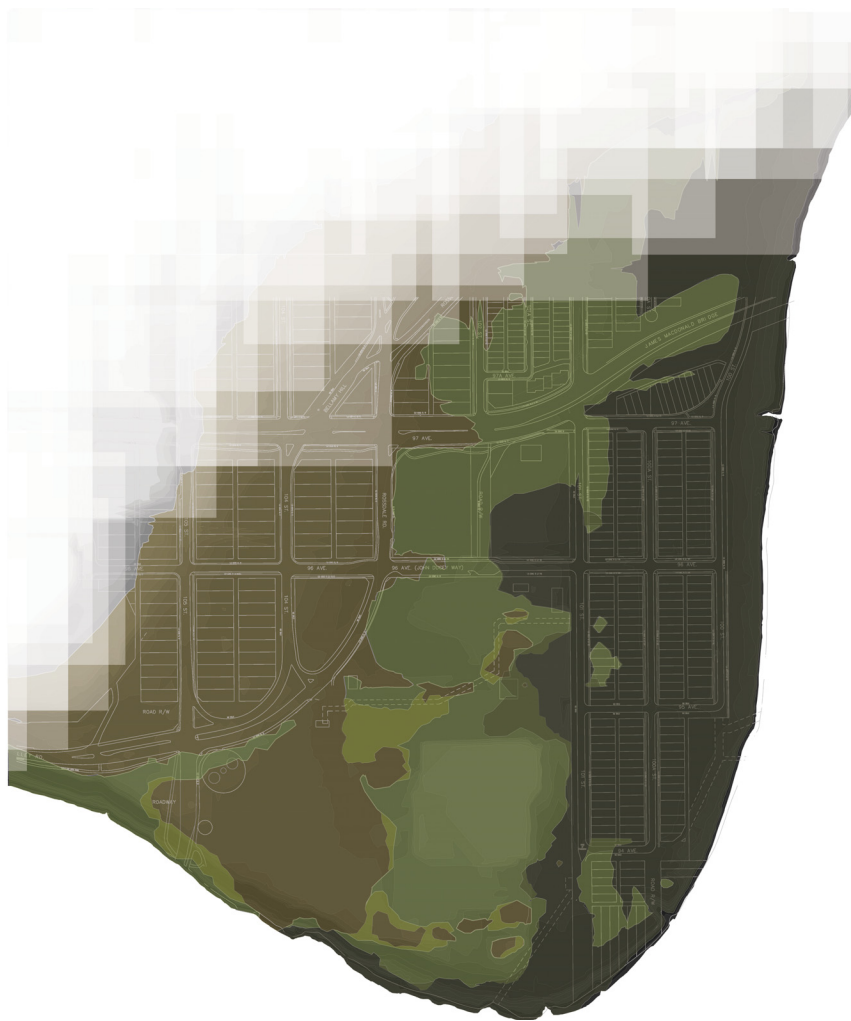


Fig. 32. Diagram of Rossdale Flats, Indicating the Approximate Location of Four Pre-existing Natural Regions: Grassland (West), Aspen parkland (Centre), Woodland forest (East) and Wetlands (Yellow).

1) Trees that traditionally line the river valley will still line the water's edge, but a new woodland area will wrap around and over the water treatment plant. The land is elevated to allow access to the rooftop (in addition to the red bridges). This creates a seamless boundary between the building and surrounding forests. Neither is contained or has mastery over the other.

2) As a flood plain, Rossdale is at the mercy of the North Saskatchewan River. This thesis requires methods of controlling the water once/if it breaches the river's embankments (see figure 33). A series of channels that also serve as circulation routes are carved into built-up embankments. Flood water is channeled away from the buildings. A large excavated embankment adjacent to the generating station assists in preventing water leakage.

3) Along the River's embankment, there are several structures that will interact with the water and bring attention to the river as a salient landscape feature. A deck that spans over the water on the west side of the power plant offers transparent views of the water and rock below; it also offers a 360° view of the valley. A second deck is located below the power plant and caters to small boats, fishermen, and serves as a ferry terminal. A third deck on the east side of the site serves as a small boat dock and fishing station. A fourth structure is a walking bridge that spans the river (leading to the Kinsmen Sports Centre and adjacent trails systems).

New development is designed to bring what is indigenous or 'innate' about Rossdale to the visitors' attention as an object of revelation. In order to reveal what already exists (or existed) the design approaches the site as an object of continual evolution - as both buildings and nature gradually grow and transform together, and are perceived as a whole.

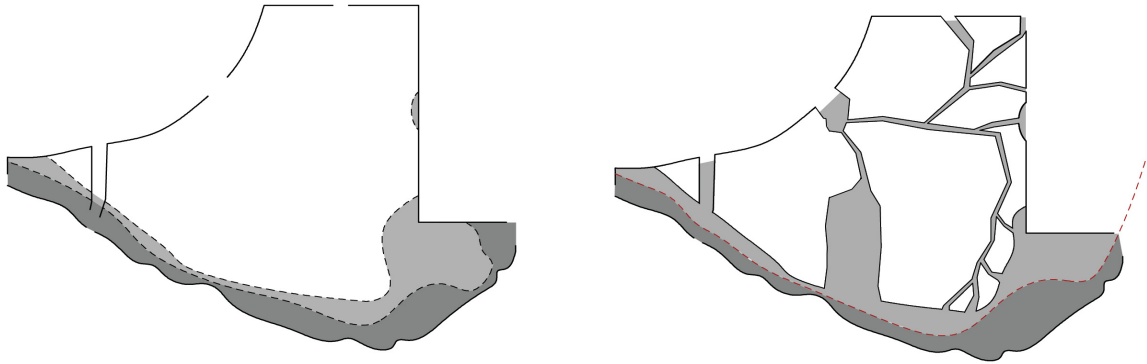


Fig. 33. Diagram Showing Existing Flood Plains and Proposed Channels.

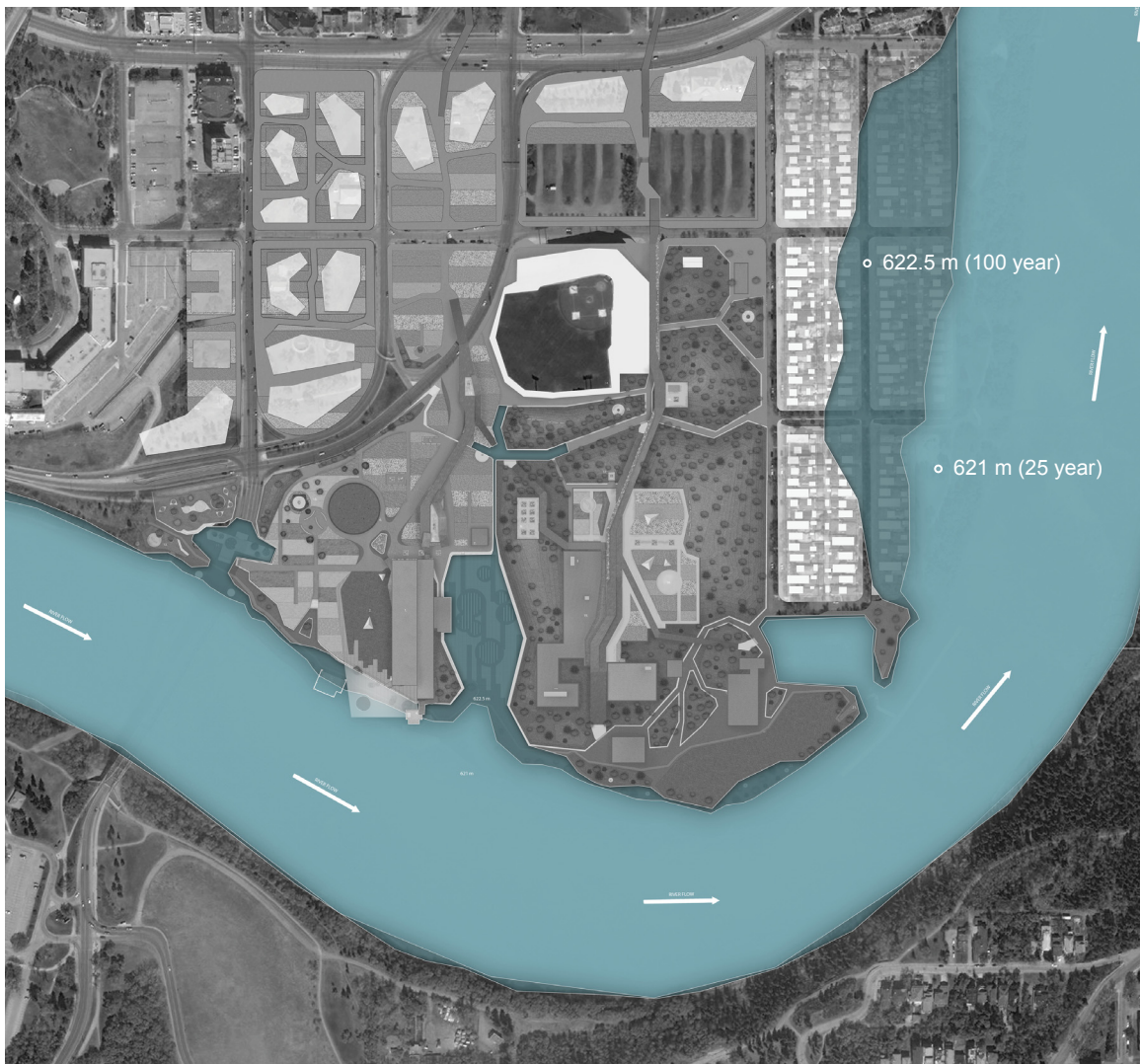


Fig. 34. Diagram Depicting 25 Year (Water Levels at 621 Meters Above Sea Level) and 100 Year Floods (Water Level at 622.5 Meters Above Sea Level).

CHAPTER 6: CONCLUSION

This thesis is a design proposal for the Rosssdale Flats, including: the Power Plant, Water Treatment Facility, and all related buildings on the Rosssdale property. In realizing the importance of history and culture in Edmonton and the urgency for conserving these places, this paper calls for a site that goes beyond idle conservation policies. It re-integrates natural vegetation regions into the landscape. It recognizes the significant histories and rituals that previously (as well as currently) belong to the site. It blends urban and natural boundaries in order to draw people to the site, and provides a protective environmental buffer zone. In other words, it is a cultural landscape that offers an interpretive memorial park and museum that aim at delivering new perspectives on the past, on nature, and on the co-existence of urban and environmental systems for the future. If it is successful in delivering these objectives, it is likely to ensure a future in Edmonton's River Valley.



Fig. 35. Red Roads Bridging the Water Treatment Facility.

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