



NORMAND AVE INFILL PROJECT

Lessons for Effective Public Engagement for Infill Projects near River Basins

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ABSTRACT

The purpose of this case study is to examine the multi-family housing development that was proposed on Normand Avenue in St. Vital. Many tensions emerged when the development was presented to neighbouring residents. The development site shape, resident opposition, and the site's environmental constraints limited potential building configurations on the site. The required building redesigns and flood-proofing measures were shown to increase construction costs for the development. Unsurprisingly, as of 2020, the development has not been built on the site yet. This case study provides lessons for planning practitioners. The first major lesson is that public engagement professionals should be included as early as possible. The second lesson is that developers must have the support of neighbouring residents and councillors to build successful infill projects in Winnipeg. This is the case even for projects that propose buildings similar to other buildings in the area. The case study also makes you realize that city planning involves balancing competing interests, especially for controversial projects that have multiple stakeholders like this one. Finally, the case study demonstrates that preliminary environmental studies help to avoid costly project redesigns later on.

1.0

SITE CONTEXT

The developer approached a planning firm to help with a rezoning proposal for their site off Normand Avenue. They wanted to rezone the land to develop a multi-family housing development on the site. Originally, they wanted to build six apartment blocks on the site. The original proposal can be seen in Figure 1.



FIGURE 1 | Original proposed development on the site

The subject site is located on Normand Avenue. The site is surrounded by different types of uses. Henteleff Park is located on the north side of the site. Single-family homes are located southwest of the site. Multi-family apartment blocks are located south of the site. St. Mary's Road is on the east side of the site. The site is connected to St. Mary's Road. It is not connected to the developments on its south side. There are other multi-family apartment buildings located near the site. These buildings are located on St. Mary's Road. On the east side of St. Mary's, there are more single-family homes. Other commercial uses are located on St. Mary's. See Figure 2 for a map of uses in the area.⁶

2.0

LAND POLICIES

The site is designated as a "Recent Community" in OurWinnipeg. These are areas that were planned after 1950. They are predominantly residential areas. They contain a mix of low and medium density housing types with nearby retail amenities. The area can accommodate some infill development to increase housing options, maximize the use of existing infrastructure, and provide options for residents to stay in their neighbourhoods as they age.



FIGURE 2 | Site and surrounding uses

Sites in the "Recent Communities" designation can support contextually-sensitive infill development. They support these types of developments because they minimize the spatial use of land. These types of developments also minimize the amount of services that have to be extended for new residents. The designation also supports housing that can accommodate various incomes, household types, abilities, and stages of life. The proposed development conforms to these land use policies.⁶

3.0

REVISED PLAN

The original site plan was presented to area residents to hear their comments. The residents were opposed to the apartments on the western edge of the site. They were worried that the apartment buildings would cast shadows on their single-detached homes. Residents were also concerned about their privacy. To address these concerns, townhouses were proposed instead of apartment buildings. This revised site plan can be seen in Figure 3.⁶

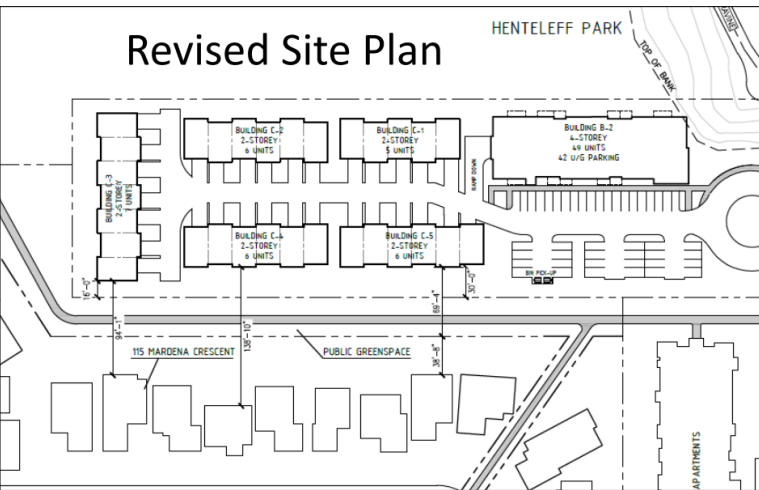


FIGURE 3 | Revised site plan following City comments

The site’s potential impacts on the river was also a concern to the residents. In response, the developer had environmental studies done on the site. The developer hired an engineering firm to do these studies.

The environmental study showed that certain portions of the proposed buildings were located on the Red River’s floodplain. The building locations were modified to reduce flooding risks. The new building locations can be seen on Figure 4.

A geotechnical study was also done on the site. As part of this study, the soils on the site were tested for their ability to support buildings. This study showed that certain portions of the site had unstable soils. This makes construction more difficult and expensive in these areas. In response, building foundations would have to be reinforced. Also, sheet pile walls would be required to build buildings there. Consequently, the site plan was revised again. This process is discussed in more detail later in this report.⁵



FIGURE 4 | Site redesign following environmental studies

4.0

OTHER RESIDENT CONCERNS

The developer conducted public engagement activities before building the project. A planning firm got involved after these activities had already been underway. Area residents had many comments to share about the proposed development.

Existing residents valued their view of the Red River. The proposed building would block their view. Many residents opposed the building based on this factor.

Many residents also valued the park space by the development. Many of them enjoyed visiting Henteleff Park and enjoyed spending time by the river. They argued that the park is a nature preserve and that this means that only a limited amount of people can use it. They were concerned that the additional residents would have an adverse effect on the park.

Many existing renters were also concerned about having new renters in the neighbourhood. They were worried that the residents would have messy balconies. They were also concerned about kids running around in the neighbourhood and in the park.^{4;6}

“The park is a preserve[...] it was actually set up in order to rejuvenate the existing riparian forest[...] very high density housing [would] have a very detrimental effect on the existing park.”

- President of the Henteleff Park Foundation⁴

5.0

OUTCOMES

No Construction Activity on Site in 2020

The City of Winnipeg has a portal that shows construction-related permits for land parcels in the city. These permits must be issued to allow construction to begin on a development application. The site's parcels were searched on the portal. No construction permits were found for any of the site's parcels. This means that the construction process has not started yet for this development. Parcels that were searched are shown in Figure 5.



FIGURE 5 | Parcels that were searched for permits

The permit portal did not have any information relating to planning approvals for the parcels. Consequently, it is unknown whether planning approval have been granted for a development on these parcels. This might mean that the development has not been submitted for planning approval yet.⁹

This would make sense considering the neighbourhood opposition to this project. The developer does not want to submit an application to develop the site if they are likely to build a development that will be blocked by local councillors due to neighbourhood opposition.

Google Maps has imagery for the site from 2020. The imagery also shows that the development has not started construction yet. No construction activity is visible anywhere on the site. This can be seen in Figure 6. Despite these observations, the developer's website states that the development will be finished in 2021.¹⁰



FIGURE 6 | View of the site on Google Maps in 2020

Delayed Construction for Infill Projects in Winnipeg

Infill developments in Winnipeg often have to contend with delayed construction timelines. For example, residents in a section of St. Vital tried to freeze infill applications for a certain period of time. This occurred after infill application numbers increased in their neighbourhood. They wanted to freeze applications for development until new development designs had to comply with the existing developments that surround them. The area's councillor pushed for these regulations. They wanted the City to review infill guidelines for the area before allowing new developments to be built. Residents in Corydon also tried to stop an infill development in that neighbourhood. In both of these examples, the proposed infill developments conformed to the City of Winnipeg's local planning guidelines.

However, these projects are different from this one. These infill projects proposed developments within existing neighbourhoods. This project is proposing to build a building adjacent to an existing neighbourhood area. Despite this factor, the development was still opposed by area residents. This occurred despite the development being very similar in character to the existing developments that surround it.^{11;12}

“I would not have purchased our house if the zoning had existed to allow for an apartment building to be built in the middle of the block.”

- Kelly Summer, Corydon-area resident¹²

OUTCOMES

Unit Type Reconfiguration and Effects on Revenue

Originally, the developer wanted to build apartment buildings everywhere on the lot to maximize their profits. Provided that their units are in demand, apartment blocks generate more profits than other types of housing. This is because they maximize the amount of units for sale per square foot of land. After consulting with residents, they decided to replace a few apartment blocks in their original design with row houses. This change can be seen in Figure 7 below.

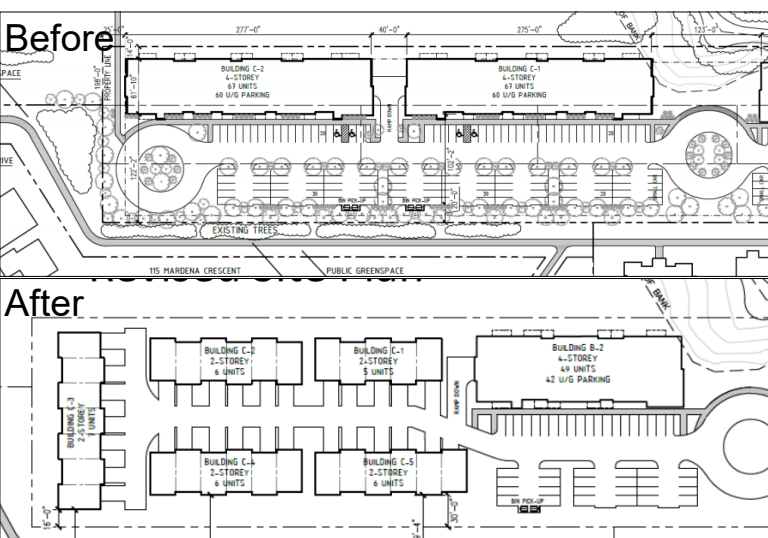


FIGURE 7 | Apartment units replaced with townhouse units

Replacing the apartment blocks with townhouses significantly decreased the amount of units in the development. Originally, the development would have had 414 units. Replacing the apartment blocks with townhouses decreased the amount of units to 359. This option might have been chosen because of the site's long and narrow shape. The site's odd shape might have made it difficult to construct other types of buildings.⁶

Decreasing the amount of units in the development can reduce the amount of potential profit for the developer. Let's run a hypothetical scenario to compare the amount of potential profit that the developer can make with the different amount and type of units. In 2018, the average rent for one bedroom apartment units in St. Vital was \$ 985 a month. In the same period, the average rent for three bedroom townhouse units in St. Vital was \$ 1241 a month.^{2,3} It is assumed that the townhouses will also be rented in this scenario.

One bedroom apartment units are used in the scenario because they are the least profitable type of units. Then, three bedroom townhouse units are assumed because they are pricier. Consequently, the first scenario is run with inexpensive apartment units, and the second scenario is run with expensive row house units. If this scenario shows that the original unit configuration is more profitable with less expensive units than the second scenario is with more expensive units for the row houses, this means that the new configuration is less likely to be profitable than the original configuration.

In the original unit type configuration, if all units were one bedrooms, the developer would be able to rent all the units and generate \$ 407 790 a month in gross revenue. In the new scenario, if all apartment units are single bedrooms and all townhouse units are three bedrooms, the developer can generate \$ 361 295 a month in gross revenue. This is a 11% decrease in gross revenue. Of course, this scenario assumes that the apartment unit sizes stay the same in the two scenarios. The development's website shows that larger apartment sizes will be offered in the future development. These sizes suggest that the gross revenue between the two scenarios is virtually identical. One can assume that the developer proposed the second configuration because the profit potential is similar enough to the first one.

Of course, apartment buildings have higher construction costs. This quick calculation does not take into account. In 2018, median construction costs per square foot for apartment buildings were 66% higher than for row houses.¹ This higher construction cost decreases the advantage of constructing apartment buildings instead of row houses on the site. This makes it possible that the second configuration actually increases profits.



FIGURE 8 | View of the proposed row house units

Building Reinforcement Requirements

As was stated before, environmental studies were conducted on the site. This was deemed to be necessary because the site is located near the river. This means that the site's soils are likely to be less stable. As part of the environmental studies on site, a geotechnical report was conducted to analyze the soils on site. Some of the buildings were located in areas where foundation reinforcements would be necessary for new buildings. These areas can be seen on Figure 9.

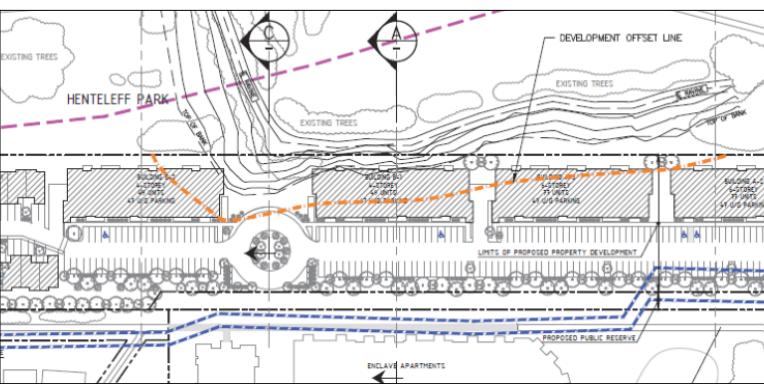


FIGURE 9 | Building foundations crossed by orange line must be reinforced

The building foundations crossed by the orange line would have to be reinforced because of the soil in the area. They would also have to be moved because of their proximity to the creek bed. The creek bed fills with water periodically throughout the year. All buildings would have to be set back from the north lot line to provide space for dykes to protect the development. The engineering firm conducting the study determined that the buildings had to be moved to protect against this flooding. Their suggestion for new building layouts on the site can be seen in Figure 10 and in the revised site plan.

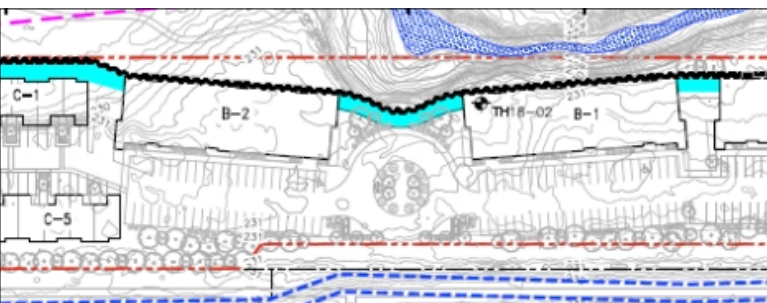


FIGURE 10 | New building locations for flood protection. The dyke corridor is highlighted in light blue.

The engineering consultant determined that all buildings on site had to reinforce their foundations because of the unstable soils. These deeper foundations increase construction costs for the developer. The apartment blocks need more reinforcements than the row houses due to their large sizes.

The apartment blocks crossed by the orange development offset line in Figure 9 also need to be reinforced with tieback sheet pile walls to stop the soils from shifting. These walls provide additional flood protection. Figure 11 shows a sheet pile wall in a building foundation. The wall and building foundations also have to be deeper in this area. The posts for the foundation have to be driven down as deep as necessary to hit stable soils before they can be installed.



FIGURE 11 | Sheet pile wall in a building foundation

These flood and soil mitigation measures increase construction costs for the developer. According to the consultant's geotechnical report, installing the sheet pile wall would cost \$ 7500 to \$ 12 500 per linear metre. Mechanically stabilized earth walls would be necessary in other areas to mitigate flood risks. These were stated to cost between \$ 500 and \$ 750 per linear metre.

Installing the sheet pile walls for three apartment blocks adds considerable construction costs. The apartment blocks in the revised site plan would require walls that are 60 m long each.⁶ Consequently, three sheet pile walls would cost \$1.35 million to build. Based on 2018 construction costs, these apartment blocks would cost at least \$ 9 million each to build. That means that the walls increase their construction costs by at least 15%!⁵

6.0

LESSONS LEARNED

Involving Public Engagement Professionals Early can Improve Project Acceptance in the Community

This project demonstrates why public engagement professionals should be involved from the beginning of a project. In this situation, the planning firm conducting public engagement activities got involved after the community was already opposed to the proposed development. This made it difficult for them to work to address resident concerns and mitigate adverse impacts when possible.

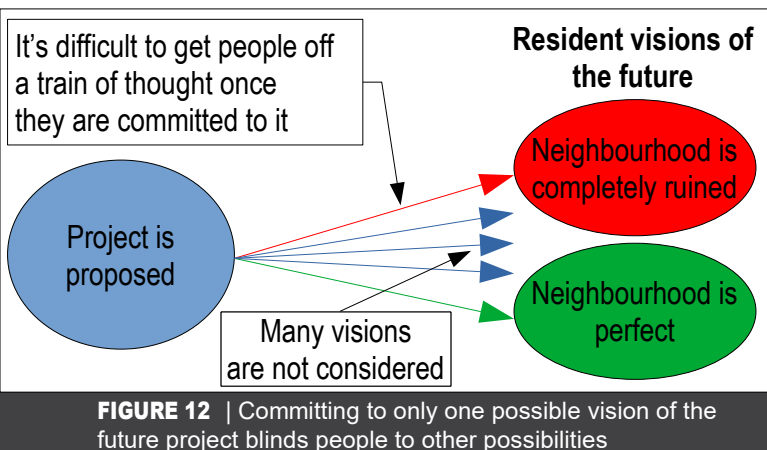


FIGURE 12 | Committing to only one possible vision of the future project blinds people to other possibilities

In this situation, when the planning firm got involved with the project, the neighbourhood residents were already committed to a vision that focused on the project's negative impacts.⁶ Psychologically, people tend to support ideas and investments they have already committed time and resources to. They tend to do this when they are individually involved in something or when they are involved in group situations. Additionally, people tend to ignore information that does not align with their existing beliefs.^{5,7}

In this situation, residents were already committed to the idea that the new project would have a negative impact on their neighbourhood. They had already committed time and resources by living in the neighbourhood for years, and this project would change it. They had already committed their time to their vision when they participated in the public engagement events that happened earlier. They also organized a committee to protect the park. All these factors made it more likely that area residents would keep opposing the development.^{4,6}

This project was surprising because one would assume that the residents would have been more supportive of the development upfront. The strongest opposition against this project in this situation came from the residents in the existing rental buildings beside the site. One would think that residents living in an existing rental building would be indifferent to a new development nearby that is similar in design to their development and other developments nearby. Figure 13 shows developments nearby that have designs that are similar to the proposed development. Nevertheless, the residents opposed it. This case study demonstrates how uncomfortable people tend to be with change. It seems to suggest that any kind of change can trigger neighbourhood opposition, even if the change is similar to existing neighbourhood conditions.



FIGURE 13 | Examples of similar developments near the site

The developer should feel fortunate that they involved the residents early. In this situation, homeowners felt engaged when developers sought out their comments. This probably made them more amenable to the project than they would have been otherwise. The engagement process also gave the developer the opportunity to help the existing residents understand the project before its construction. In this situation, the original homeowners were not the strongest opposition to this development. Their concerns were heard and accommodated through the revised site plan. The renters were more opposed to the project. More consultation with these residents upfront could have avoided some of this opposition. Also, if the planning firm had been hired earlier, they could have helped the developer highlight the project's potential benefits instead of having to help explain how its potential drawbacks can be minimized.^{4,6}

6.0

LESSONS LEARNED

Local Councillors Influence Planning Applications

Winnipeg's community committees review local planning applications and effectively approve or reject them. Figure 14 shows the development's location and its corresponding community committee. This is an unusual system unique to Winnipeg. In practice, this gives local councillors the power to block or delay planning applications that are unpopular with neighbourhood residents. This can happen even if these developments conform to City planning policies. This system was put in place when Winnipeg was amalgamated to allow former city areas to retain some of their decision-making powers. Consequently, in Winnipeg, it is very important for developers to consult with residents early to understand their concerns and mitigate adverse project impacts whenever possible.

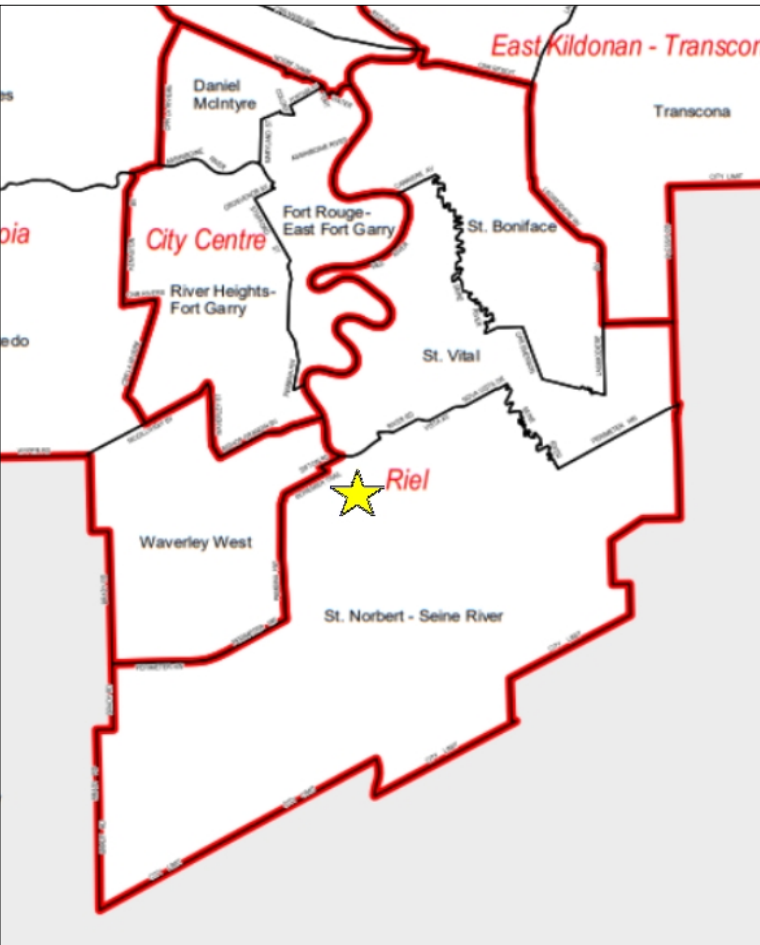


FIGURE 14 | Community committee boundaries. The site's approximate location is marked with a gold star.

Surprisingly, Existing Renters can Oppose New Renters

Some homeowners will oppose new rental construction or renters near them. These homeowners feel that renters are not committed to the neighbourhood since they do not own their homes. This sometimes makes it challenging to build new rental housing near existing residential neighbourhoods.

As Renters Move In, Some Homeowners Fret



Neighborhoods across the country are being transformed, as houses built for homeowners are turned into rental properties. Residents of one such community in Memphis, Tenn., discuss the changes. Lance Murphey for The New York Times

FIGURE 15 | Headline of an article about homeowners resisting new renters in their neighbourhood

The opposition to this project was surprising to me. The main opponents were existing renters in an upscale rental property beside the proposed development. The existing renters were older adults. They were concerned that the new renters would be noisy. They were worried that they would keep too many things on their balconies. Some of them were also worried about Henteleff Park being overcrowded because of these new residents. This project demonstrates that project opposition can come from all kinds of people.^{4,6}

Perhaps as a response to this community push-back, the developer has marketed the development as an upscale rental property. The apartment buildings will feature high-end finishes, fitness facilities, multi-purpose rooms, concierge services, and games rooms.¹⁰

LESSONS LEARNED

City Planning Requires Balancing Different Interests

Different interests must always be balanced in city planning. These different interests create tensions. Tensions always exist between ecological needs, community needs, developer needs, lender needs, and individual needs.

In public engagement exercises, community and individual needs tend to be the focus. Community needs include providing housing, transportation, and recreation options for all residents; creating jobs; having the right kinds of employees in the right locations in a city; and meeting people's basic needs for life. Peoples' personal needs include their individual attachments to their neighbourhoods; their preferences for its character; their property values; and their personal (often precarious) economic situations.

According to the hierarchy of needs in Figure 16, individual economic needs are the most important needs for residents because they provide for their physiological and safety needs. Consequently, councillors that vote on planning applications will often prioritize individual economic needs because they are counting on the residents for votes. This can happen even when proposed developments fulfill many community needs.

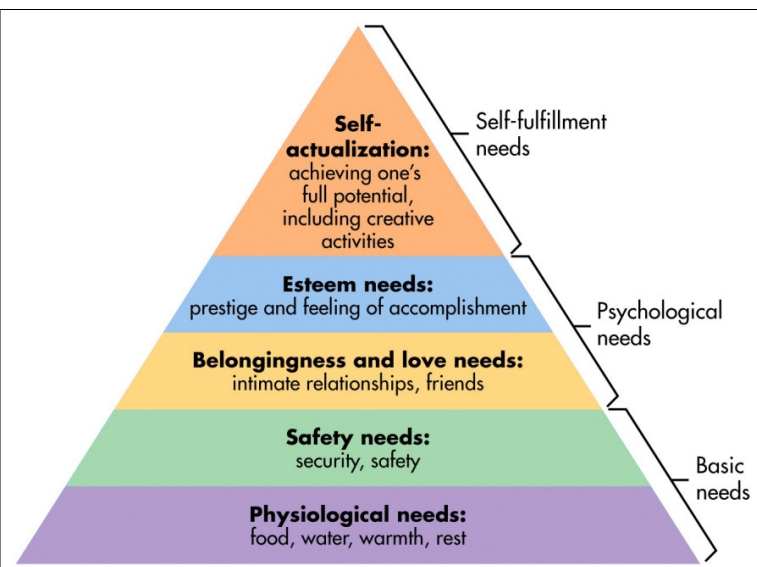


FIGURE 16 | Maslow's hierarchy of needs. It is easier to satisfy needs higher on the pyramid when basic needs are already satisfied.

Complex projects like this one will result in more tensions than other ones. This project is complex because there are many constraints imposed on it. The site's shape restricts the type of developments that can be built on it. The surrounding residents will influence the development's ability to be built. Its location by the river means that environmental constraints have to be mitigated.

Since the project is complex, that also means that its solutions are not necessarily easy to figure out. And even if solutions are imposed, these have the potential to adversely affect other factors of the project. Also, its complexity will make it more difficult for people to understand it. This is unfortunate because people will often reject things they do not understand and cling to what is familiar to them.

Environmental Constraints Should be Evaluated During the Site Design Stage

Developers in Manitoba are not required to assess the environmental impacts of their developments. This project demonstrates that environmental constraints can significantly affect a project's final design. To limit major redesigns caused by site features, environmental assessments should be conducted prior to site design activities. Even simple assessments will lower the chance of major redesigns being needed for proposed projects in the province.

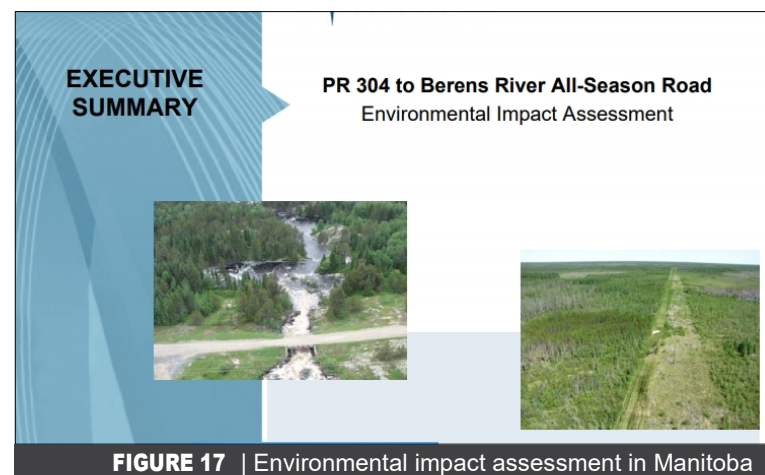


FIGURE 17 | Environmental impact assessment in Manitoba

This might not be necessary for all types of sites. However, some projects like this one are located in more sensitive locations. For these projects, one can see why it would be valuable to quickly evaluate environmental site constraints prior to creating a development plan.

CONCLUSION

This case study examines the Normand Avenue redevelopment project in St. Vital. The developer in this case study wanted to build multi-family rental housing on a lot that supports that type of development. The lot is located adjacent to Henteleff Park.

In its first redesign, apartment blocks were replaced with row houses. This happened after nearby homeowners voiced their concerns about privacy and shadows. After that, residents from a nearby rental apartment complex and from the Henteleff Park conservation group tried to oppose the building's construction.

Due to these circumstances, as of 2020, construction has not started on the building. Constructing the redesigned building will result in less revenue for the developer than they initially expected. This is because the amount of units for sale was reduced when the project was redesigned. Also, unforeseen flood and geotechnical expenses on the site will increase the project's construction costs.

Certain lessons were learned from this case study. This project demonstrates that public engagement professionals should be involved at the beginning of a controversial, complex project like this. Their expertise can help mitigate possible opposition that might arise. Also, city councillors in Winnipeg have the power to effectively block certain projects in their ward. This means that resident opposition to a development can block it even when this development conforms to city planning best practices for the area. This case study also shows that residents can be opposed to a new project that is very similar to other projects in the area. All these factors demonstrate that complex projects do not have simple solutions. They also show how local residents can reject a project proposal early if they feel that their needs are threatened by the new project. Finally, this project also demonstrates that analyzing a site's environmental constraints prior to proposing a development for the site can limit the amount of site redesigns that need to take place.

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