

# **Community Story 2: Northern Affairs Community Operated Regional Waste Disposal Site**

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**2024 MARR Forum**  
October 16-17, 2024



# Presentation Overview

- Northern Affairs Branch - Who we are and what we do
- Northern Affairs communities and Municipal Service Delivery
- Example of well-designed Northern Community Operated Regional Waste Disposal Site
- Summary
- Q&A

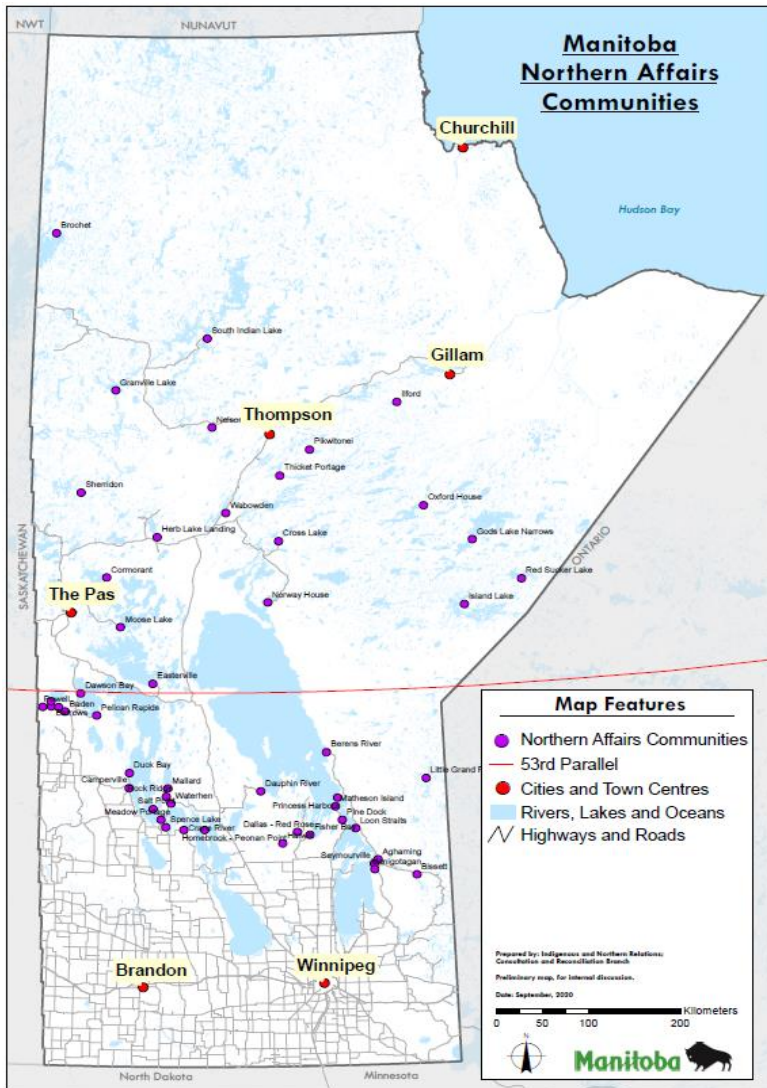
# NAB – Who We Are

- A branch of the Department of Municipal and Northern Relations (MNR)
  - Formed in 1966 as MANA (Manitoba Aboriginal and Northern Affairs) under a new Northern Affairs Act (NAA).
  - Act gave power to a Northern Affairs Commission to provide designated northern communities municipal services including solid waste management.
  - Currently, NAB provides funding and consultation services to 48 northern communities for construction, operation, and maintenance of municipal services assets and infrastructure including Waste Disposal Sites (WDS).
  - ***The 48 communities do not include Indigenous Services Canada funded communities typically referred to as First Nations.***

# Northern Affairs Communities and Municipal Service Delivery

- In majority of NA communities, Manitoba owns the assets and the infrastructure used to provide municipal services.
- Communities are the stewards of these provincial assets and provide day-to-day operation and maintenance of infrastructure.
- NAB, Mayor and council, CAOs and Public Works Employees (PWEs) work collaboratively to operate and maintain assets.
- NAB provides core O&M funding and consultation services to community leaders and PWEs on best O&M practices for each asset located within the community.

# Northern Affairs Communities Continued



- Challenges Northern Affairs Communities face with municipal services delivery.
  - Small population base (typically less than 500 people per community) = small pool of qualified workforce.
  - Geographically remote and often isolated means no access to services provided by urban centers.
  - Locally generated revenue minimal to non-existent leading to funding pressures for capital projects, construction and O&M.
  - Still must meet regulations associated with municipal services delivery.

# Northern Affairs Communities Continued

- Shared services are one way of overcoming capital and O&M funding pressures, limited pool of qualified personnel, and meeting stringent regulations.
- NAB strongly encourages collaboration between neighbouring communities to achieve common goals while maximizing available resources.
- Currently NAB in partnership with two (2) NA communities to run and operate two (2) Regional Waste Disposal Sites (RWDS).
- One of these sites is the focus of today's presentation.
  - Well designed
  - Well constructed
  - Well operated

# Example of Well-Designed & Operated Regional Waste Disposal Site



# Well-Designed & Operated RWDS Cont'd

- Prior to construction of RWDS each of the six (6) NA communities operated its own unlined, non-engineered WDS posing significant risks to the environment; not meeting environmental regulations.
- No formal recycling program; waste diversion only in some communities.
- Feasibility studies – 2005-2013, design 2014 -15, construction and commissioning 2016-19.
- Services over 1270 residents from six (6) communities, one (1) FN, and numerous cottages located in southwest Manitoba.
- Types of waste;
  - Residential – domestic waste from primary and seasonal dwellings.
  - Construction, renovation and demolition – concrete, painted wood, rubble, drywall, metal, cardboard, doors, windows and wiring.
  - Commercial and institutional – waste from shopping centers, schools, restaurants & offices, etc.

# Well-Designed & Operated RWDS Cont'd

Community ID	2011 Population (Census Data)	2021 Population (Census Data)	Own Site	Household Waste	Construction/Demolition	Commercial (minimal)
A (Operates RWDS)	169	182	Yes	Yes	Yes	Yes
1	130	129	No	Yes	Yes	Yes
2	82	77	No	Yes	Yes	Yes
3	134	102	No	Yes	Yes	Yes
4	46	45	No	Yes	Yes	Yes
5	69	72	No	Yes	Yes	Yes
Cottages	Unknown	Unknown	No	Yes	Yes	Yes
First Nations Reserve	-	671	No	Yes	Yes	Yes

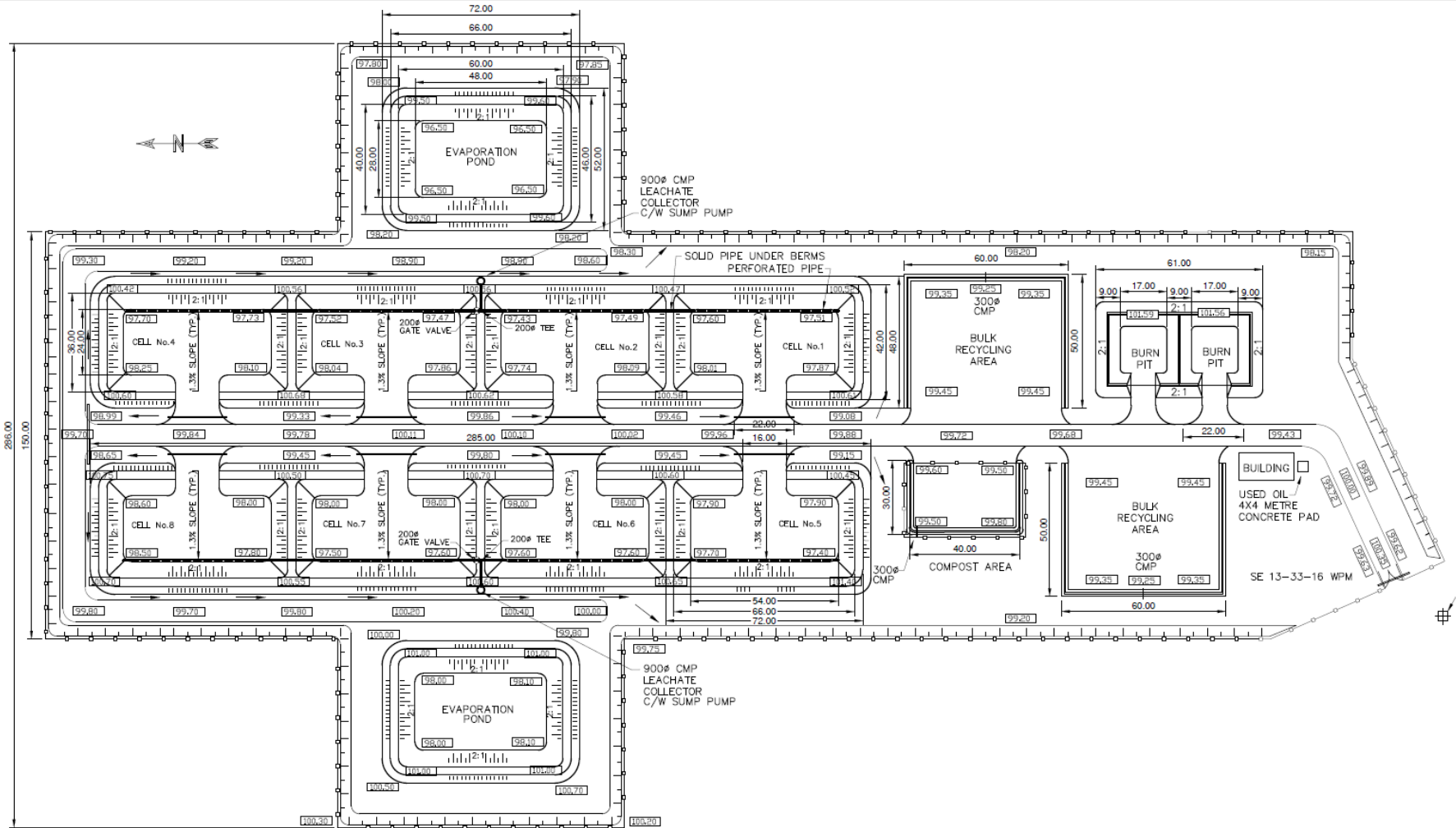
## Well-Designed & Operated RWDS Cont'd

- 2013 Feasibility Study included two options (estimated cost over 25-year Life Cycle).
- Options 1 – All sites compliant with regulations:
  - Construction - \$3.5 M
  - Operating - \$ 2.9 M
  - **Total Life Cycle - \$3.5 M**
- Options 2 – RWDS
  - Construction - \$ 1.7 M
  - Operating - \$ 1.7 M
  - **Total Life Cycle - \$3.4 M**
- Option 2 was chosen for the following reasons:
  - Centralized approach requires max 2 Operators compared to 12.
  - Reduced risk to environmental contamination (1 site as opposed to 6).
  - Pooled resources for more efficient operation.
  - Easier to institute formalized recycling program by requiring curbside pick-up and encouraging waste diversion.
  - More capacity at RWDS allows expansion to other communities.

# Well-Designed & Operated RWDS Cont'd

- Participating communities are required to have mandatory waste reduction and recycling program through either contracted curbside pickup or transfer station (TS).
- Contracted curbside pick-up delivers blue bin recyclables to local recycling center/processor.
- Three (3) of the six (6) communities received TS as part of RWDS construction contract (with trailers to haul waste).
- RWDS accepts household waste from the participating communities and only bulk recyclable materials from two (2) communities without TS.
- Residents deliver household waste and bulk material to TS stations only on set days and times.
- Each community has designated days and times for waste delivery to RWDS.

# Well-Designed & Operated RWDS Cont'd



# Well-Designed & Operated Site Cont'd



# Well-Designed & Operated Site Cont'd



# Well-Designed & Operated RWDS Cont'd



# Well-Designed & Operated RWDS Cont'd



# Well-Designed & Operated Site Cont'd



# Example of Well-Designed & Operated Site Continued



# Well-Designed & Operated Site Cont'd



# Well-Designed & Operated RWDS Cont'd



Compacting



More Compacting



## Compacted Waste



## Sprinkling cover material



Compacted Cover Material



Cover Material Stockpile



# Summary

- RWDS operated by one Operator with tracked Kubota skid steer as primary equipment for compaction and cover material application.
- Limited pool of qualified personnel overcome by well-designed and operated centralized solid management services.
- O&M costs shared by participating communities through service agreements with one community responsible for O&M.
- Facility meeting regulations for design and construction, site access and fencing, monitoring and reporting, compaction and cover material application and site safety through controlled access.
- Facility has capacity for expansion to cater to more communities and offer wider services.
- RWDS working towards household hazardous waste.

~ Questions ~