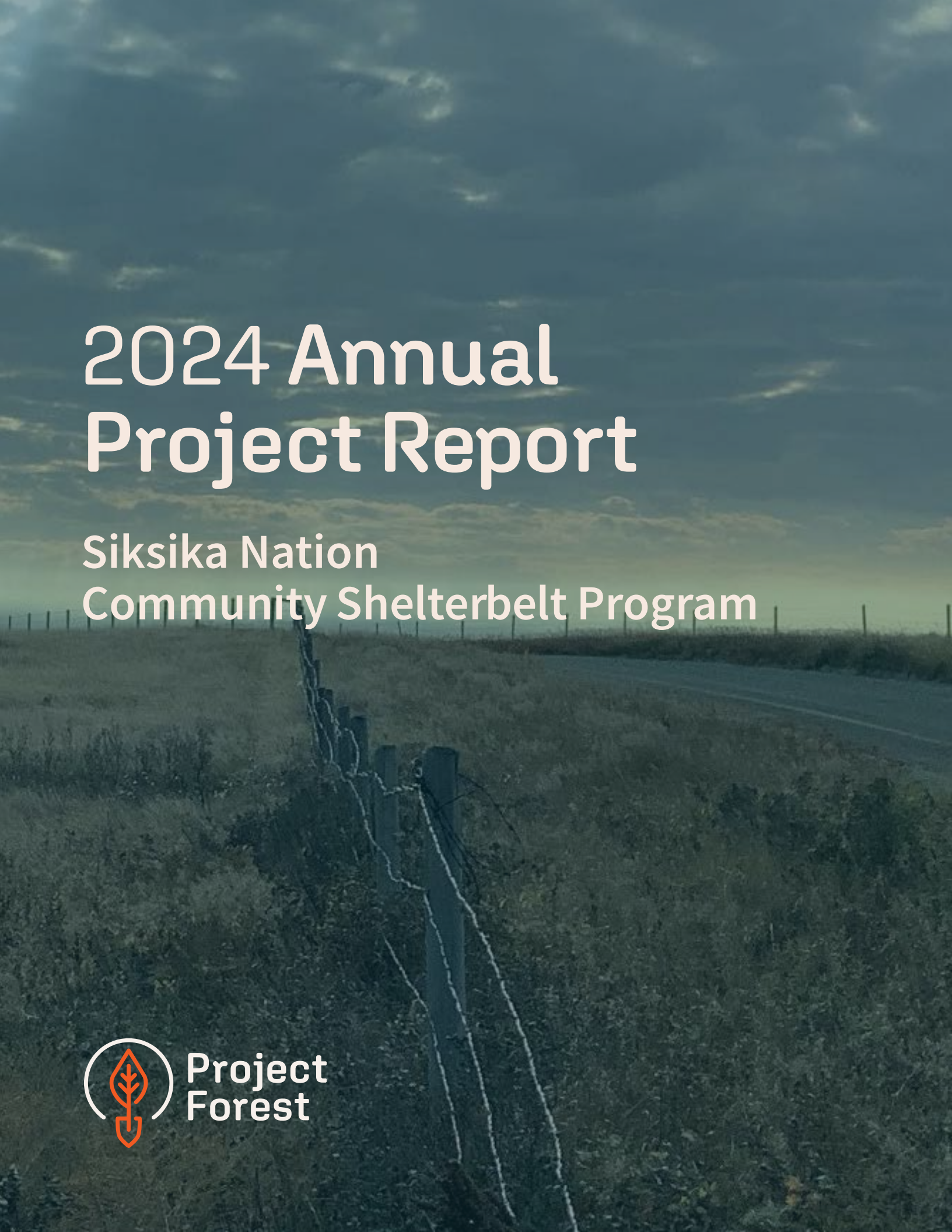
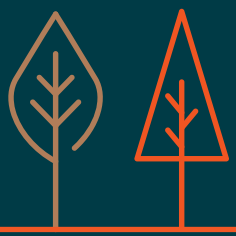


2024 Annual Project Report

Siksika Nation Community Shelterbelt Program

Project Forest

Contents



Land Acknowledgement
| Traditional Territories

Member of Cumberland House Cree Nation (CHCN) at the CHCN Food and Medicine Forest

Project Forest acknowledges that our work is conducted on both Treaty and non-Treaty lands. These lands are the traditional territories of First Nations and Indigenous Peoples. We recognize that our work is intertwined with the deep and diverse histories of Indigenous Peoples. We are grateful for the opportunity to work in these territories and are committed to the recognition and respect of those who live or have lived, travelled, and gathered on these lands for time immemorial.

About Us

| Our Mission and Values

Rewilding Canada, one forest at a time.

Project Forest is a non-profit organization working in partnership with conservation groups, Indigenous communities and Canadian businesses to make a positive environmental and social impact in our communities through planting forests. The forests we plant clean the air and water, increase biodiversity and contribute to the overall health and well-being of our communities.

Our work is rooted in our values.

Responsibility

We believe it is our responsibility to use our skills, knowledge, and experience to bring about positive change in the world.

Reciprocity

We recognize that we have benefited from the earth's resources and are committed to giving back through careful and thoughtful solutions.

Humility

We are grateful for the opportunity to learn from nature, to contribute to improving our environment, and to make a positive impact in people's lives.

Transparency

We document, monitor, and share our processes and findings with partners and the public—every step of the way, on every project.

Community

We create spaces where people can connect with nature, and each other. We respect every community we are invited into, and work together to make positive change.

Overview

| United Nations Sustainability Development Goals

Goals to Transform Our World

Planting new forests is critically important in addressing the challenges of our time, particularly when aligned with the United Nations Sustainable Development Goals (UN SDGs). As our communities grapple with climate change and biodiversity loss, forests emerge as pivotal solutions that intersect with multiple UN SDGs including, combating climate change and preserving biodiversity, fostering economic development, ensuring food security, promoting clean water access, and advancing social equity. Aligning the impacts of our forests with the UN SDGs is essential for communicating to stakeholders our dedication to sustainability, transparency, and the measurement of progress over time.

In our 2024 Annual Report, we have linked the outcomes of our rewilding projects with relevant UN SDG targets and indicators, as well as aligned them with corresponding Environment, Social, and Governance goals. This comprehensive approach ensures that our partners have readily accessible information for corporate sustainability reporting, simplifying the process and enhancing transparency.

Purpose & Positive Impact

The following UN SDGs are impacted by the Project Forest Siksika Nation Community Shelterbelt Program

Purpose

Positive Impact

Overview

| Forest Facts

About the forest you funded.

NAME

Siksika Nation
Community Shelterbelt Program

DATE PLANTED

Spring 2024

TOTAL SEEDLINGS PLANTED

137,690
Trees & Shrubs Planted

SPECIES PLANTED

Common Caragana (88,390)
Colorado Blue Spruce (13,860)
Okanese Poplar (11,245)
Manitoba Maple (5,110)
Green Ash (3,600)
Northline Saskatoon (3,575)
Scots Pine (2,970)
Sea Buckthorn (2,780)
Showy Mountain Ash (2,520)
Ponderosa Pine (1,620)
Silver Buffalo Berry (1,320)
Smokey Saskatoon (570)
Wild Red Raspberry (130)

LOCATION

Siksika First Nation
Treaty 7 Territory
50°47′N 112°55′W

SIZE

27,800 meters

TOTAL SPECIES PLANTED

13

TOTAL CO2 REMOVED FROM THE AIR*

48,860 metric tonnes in Phase 1

* Metric tonnes of carbon dioxide (CO_2) projected to be removed from the air over 150 years.

Purpose

| UN SDG 15 - Life on Land

Goal: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

Matching ESG Goals:

- Providing clean air and water
- Improving biodiversity
- Re-establishing traditional landscapes

Project Forest is making a positive impact through creating natural shelterbelts that protect the land, increase forest cover, enhance biodiversity, and promote the sustainable use of terrestrial ecosystems.

Indicator 15.1.1: Forest area as a proportion of total land area

The Project Forest Siksika Nation Community Shelterbelt Program is a collaboration between Project Forest and Siksika Nation, aimed at bringing urgently needed trees to the community over five years. The program seeks to address the lack of natural infrastructure in both residential and agricultural areas, where community members are increasingly feeling the effects of climate change.

137,690

Total Trees & Shrubs Planted in 2024

Purpose

| UN SDG 15 - Life on Land

Indicator 15.1.2: Proportion of important sites for terrestrial and freshwater biodiversity that are covered by protected areas, by ecosystem type

Project Forest partners with Indigenous communities to plant trees, shrubs, food and medicinal plants that contribute to increasing nature and forested areas .

This project directly enhances biodiversity and improves ecosystem services through the careful planting of tree and shrub seedlings. Species for this project were selected in consultation with Siksika Nation for their ability to survive in the adverse growing conditions identified throughout the project area.

27,800
meters of Land Planted

The Project Forest Siksika Nation Community Shelterbelt Program is a collaborative, multi-year initiative designed to enhance tree cover, protect against extreme weather, and provide cultural and ecological benefits to the community. Historically, First Nations communities, including Siksika Nation, were excluded from federal programs that supplied farmers with trees for shelterbelts across the prairies. This left their lands more vulnerable to harsh climatic conditions, wind damage, and soil degradation.

The installation of shelterbelts throughout the Nation will provide numerous benefits, including:

- Improve human health and living conditions,
- Privacy from the vehicle traffic,
- Reduced noise from highway traffic,
- Shelter from the wind and snow in the winter,
- Shade in the summer,
- Foods and medicine source for the community,
- Preserve topsoil within the agricultural regions of the Nation,
- Safer winter driving conditions through capturing snow drifts,
- Create wildlife habitat, and
- Sequestering carbon.

13
Different Species of Trees & Shrubs

This program will use three varieties of shelterbelts, each with their own unique benefits. They are:

- Community Shelterbelts
- Agriculture Shelterbelts
- Transportation Shelterbelts

During the first phase of the project, 137,690 seedlings were deployed throughout Siksika Nation. Thirteen different species were planted, they were selected because of their ability to survive in harsh growing conditions such as direct sunlight and limited amounts of water. Phase One is projected to remove 48,860 tonnes of CO_2 from the atmosphere while enhancing food and medicine availability, habitat for wildlife, and overall community well-being.

Purpose

| UN SDG 15 - Life on Land

Table 1: Seedling Planting Numbers

Project Event	Seedlings
Corporate Planting	7,020
Seedling Giveaway	6,795
Professional Planting	123,875
Seedlings Total	**137,690**

The Siksika Nation Shelterbelt Program prioritizes creating a long-lasting, climate-resilient solution for the community, selecting tree and shrub species best suited to the region's challenging conditions. While only one native species is included: silver buffaloberry, the chosen mix reflects careful research and collaboration with community leaders to ensure the shelterbelts can thrive and provide lasting benefits.

Species selection was guided by site-specific ecological constraints, including temperature extremes, desiccating winds, and low annual precipitation. To address these challenges, drought and cold-tolerant species not commonly found in the region were introduced based on their demonstrated resilience in comparable climates.

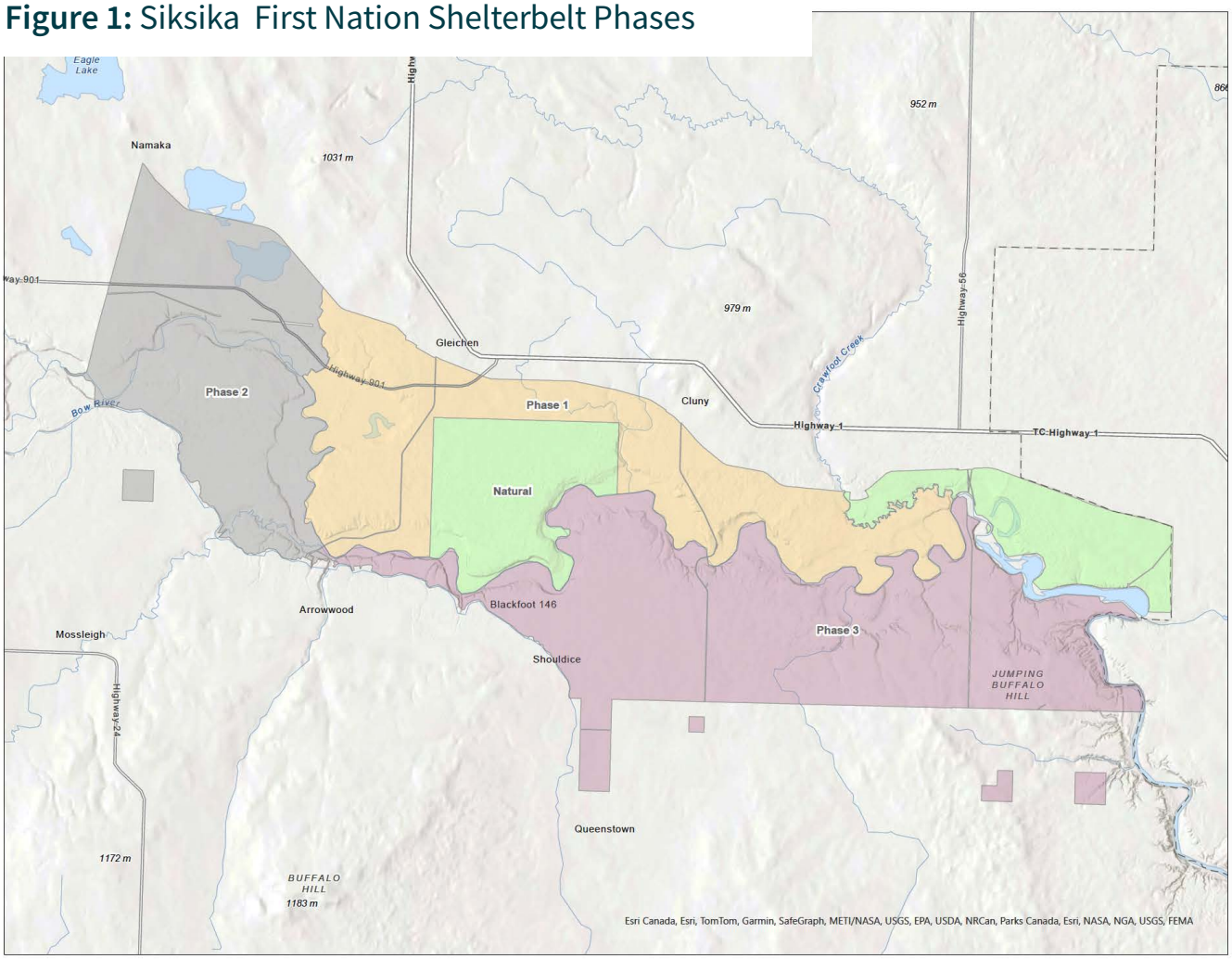
The objective is to establish long-term, self-sustaining shelterbelts that protect soil, enhance biodiversity, and improve people's lives —aligning with UN Sustainable Development Goal 15.3 (Combat desertification, restore degraded land and soil) and 15.5 (Protect biodiversity and natural habitats).

Silver Buffaloberry

The new species agreed upon after extensive research and discussion with the Sikiska Nation Elders, Council Members and Community were:

- Colorado Blue Spruce
- Scots Pine
- Okanese Poplar
- Manitoba Maple
- Common Caragana
- Sea Buckthorn
- Green Ash
- Northline Saskatoon
- Showy Mountain Ash
- Ponderosa Pine
- Silver Buffalo Berry
- Smokey Saskatoon
- Wild Red Raspberry

Figure 1: Siksika First Nation Shelterbelt Phases



N

Project Forest
Siksika First Nation
Shelterbelt Phases

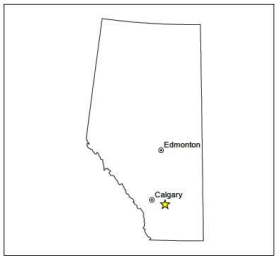
Project Partners:

Project Forest

Siksika Nation

Legend

Shelterbelt Phase
- Natural
- Phase 1
- Phase 2
- Phase 3



0 2.5 5 Kilometers

Spatial Reference
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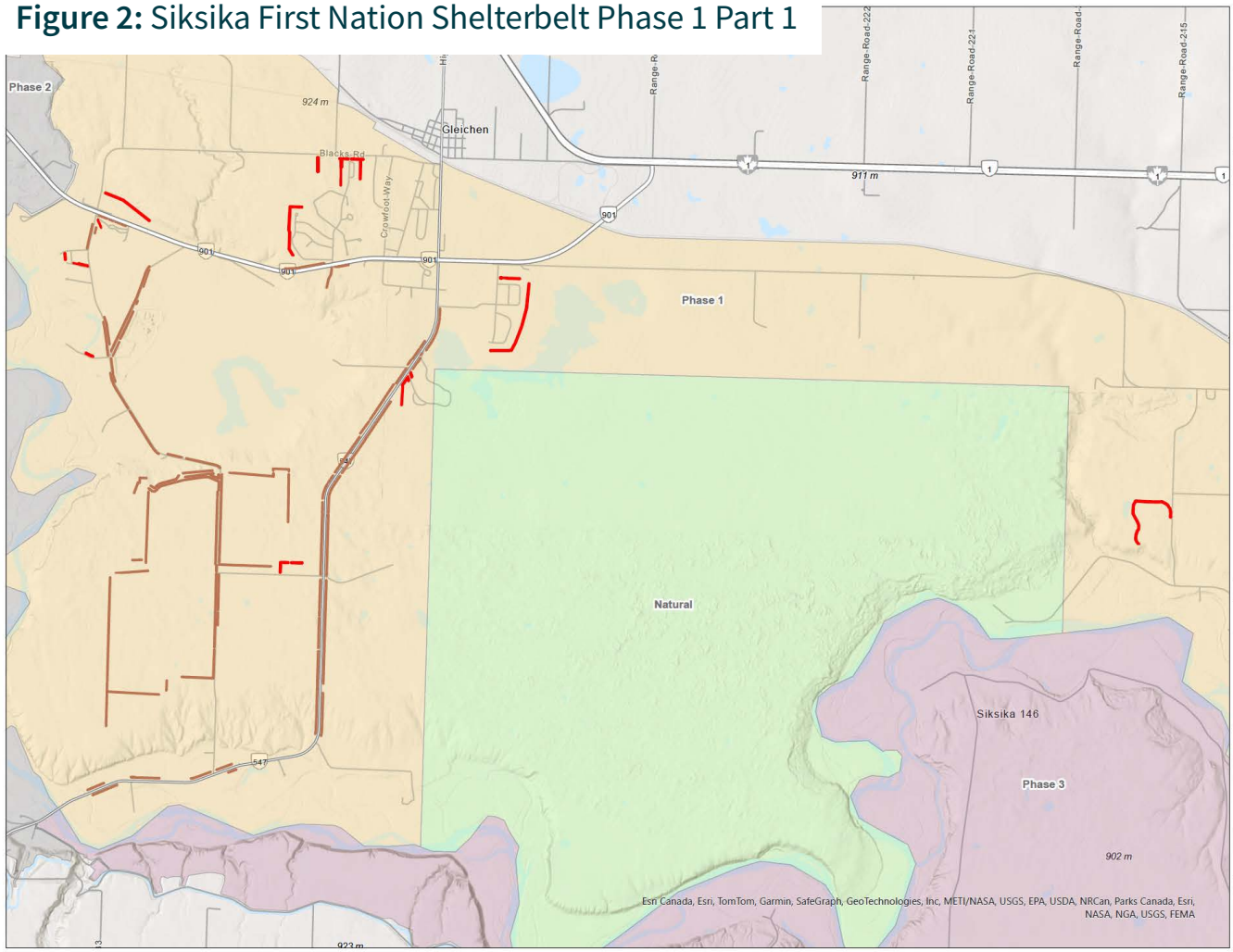
Datum: North American 1983
Projection: Transverse Mercator
Scale: 1:185,000

TreeTime Services Inc.

Figure 2: Siksika First Nation Shelterbelt Phase 1 Part 1



N

Project Forest
Siksika First Nation
Phase 1 - Part 1

Project Partners:

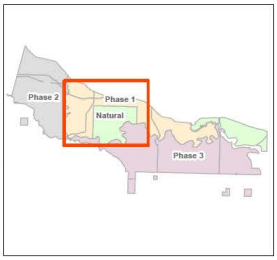
Project Forest

Siksika Nation

Legend

Agriculture Line
Community Line

Shelterbelt Phase
- Natural
- Phase 1
- Phase 2
- Phase 3



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Spatial Reference
Name: NAD 1983 UTM Zone 12N
Datum: North American 1983
Projection: Transverse Mercator
Scale: 1:54,000

TreeTime Services Inc.

Purpose

| UN SDG 15 - Life on Land

Indicator 15.2.1: Progress towards sustainable forest management

Through the Siksika Nation Community Shelterbelt Program, Project Forest is helping the community enhance degraded lands and create shelterbelts that provide lasting environmental benefits. **The program's Shelterbelt Plans, Monitoring Protocols, and Remediation Actions ensure that every seedling planted contributes to SDG Indicator 15.2.1** by advancing sustainable tree management principles on a local scale. These shelterbelts improve air and water quality, provide wind protection, foster wildlife habitat, and strengthen the community's connection to the land; ensuring environmental and cultural benefits for present and future generations.

Rewilding Plans

Prior to planting, we create a Rewilding Plan to identify and address any challenges and to ensure that the seedlings planted have the best chance of survival.

To create a Rewilding Plan, a site visit is conducted to survey the area where we identify and develop mitigation strategies for any site limiting factors and come up with a recommended species list. After consultation with the Nation we finalize the number and types of species that will be planted. Our Rewilding Plans include detailed planting maps, site limiting factor mitigation strategies, end of life vegetation management plans, site preparation prescriptions, and a project specific monitoring plan.

We tailored our rewilding plan based on site limiting factors suchs as: high summer and low winter temperatures, limited moisture availability, soil compaction, and potential salt contamination from road maintenance, [Appendix A - Work Scope].

The plan was designed to create benefits to the Nation such as: reduced winter winds, lowering summer temperatures, privacy from highway traffic, reduced noise pollution for the communities throughout the Nation, top soil conservation, increased biodiversity and safer winter travel due to the snow catching potential of mature shelterbelts

Monitoring Protocols

During project design and budgeting, Project Forest budgets for a 25% mortality event for all projects. While planning for the best, preparing for the worst is a prudent strategy to ensure Project Forest achieves the objective of mature trees throughout all of its project areas.

Each site is surveyed annually, the results of the survival surveys are used to determine if a fill plant is required, [Appenix C - Site Survey].

Sustainable Forest Management is a way of using and caring for forests to maintain their environmental, social, cultural and economic values and benefits over time (NRCAN, 2024).

Purpose

| UN SDG 15 - Life on Land

The results of the Phase1 Part 1 site surveys are as follows:

Table 2: Agriculture Shelterbelt

Species	Planted	Visited	% Alive (of Visited)
Blue Spruce	14,300	3465	26.2%
Ponderosa Pine	9500	2455	20.4%
Manitoba Maple	630	400	34.4%
Okanese Poplar	22,490	3600	18.8%
Sea Buckthorn	1280	530	0.4%
Common Caragana	20,600	4350	2.8%

Table 3: Community Shelterbelt

Species	Planted	Visited	% Alive (of Visited)
Blue Spruce	2070	675	36.7%
Ponderosa Pine	5410	2200	53.5%
Manitoba Maple	2210	950	19.4%
Okanese Poplar	1755	230	30.2%
Sea Buckthorn	720	190	17.6%
Common Caragana	7000	1580	1.0%
Silver Buffaloberry	350	120	4.3%
Green Ash	4030	1090	7.4%

A mortality event has been observed, initiating the requirement for a targeted fill plant. Prior to scheduling this silvicultural activity a comprehensive survey will be conducted in 2025. We hope to assess 100% of the previously planted area. The primary objective of the 2025 survey is to generate high-resolution data on survival rates and stocking density to inform the design and scope of the fill plant.

Project Forest will proceed with Corporate Planting events in September 2025, during which approximately 12,000 seedlings will be strategically deployed to address identified mortality hotspots as an interim mitigation strategy.

Purpose

| UN SDG 15 - Life on Land

Project Forest in conjunction with Pembina Pipelines, will host the ***"Pembina Pathways Days,"*** which is their largest staff volunteer event of the year.

As part of our adaptive management strategy, two-person field teams will be deployed to systematically assess seedling survival across all shelterbelt planting sections. This ground-truthing exercise is designed to validate the 2024 survey data and ensure an accurate understanding of establishment success. Our objective is to achieve 100% spatial coverage of the planted area to identify underperforming zones and guide targeted remediation efforts.

Species selection for replanting will be data-driven. Only those species demonstrating high survivability and ecological compatibility will be included in the fill plant, while poorly performing species will be excluded. This approach supports more efficient resource use and improves the likelihood of long-term success.

Importantly, elevated mortality rates are not viewed as project failures, but rather as critical learning opportunities that enable evidence-based course correction. This aligns with our long-term commitment to ecological restoration under SDG 15.3 (restore degraded land) and 15.5 (protect and restore biodiversity).

The survey will be conducted in October 2025. Upon completion, results will inform species-site matching, causal analysis of mortality, and development of a refined planting strategy grounded in local performance metrics.

Siksika Nation Site Survey

Purpose

| UN SDG 13 - Climate Action

Goal: Take urgent action to combat climate change and its impacts.

Matching ESG Goals:

- Reducing GHG emissions
- Experiencing nature in an educational and interactive way

The shelterbelts we build can have a significant impact on mitigating climate change.

Indicator 13.2.2: Total greenhouse gas emissions per year

The shelterbelts act as carbon sinks, absorbing carbon dioxide (CO2) from the atmosphere through photosynthesis and storing it in their biomass and soil. By planting them, we increase the amount of CO2 sequestered, thereby reducing the concentration of greenhouse gases (GHGs) in the atmosphere. This helps mitigate climate change by reducing the amount of CO2 that contributes to global warming (NRCAN, 2022).

Over 800,000 more seedlings are projected to be planted in Phase Two and Phase Three of this project over the next few years. The total amount of CO2 projected to be removed from the atmosphere from the Siksika Nation Community Shelterbelt Program is around 355,630 tonnes.

Project Forest typically uses the Carbon Budget Model of the Canadian Forest Sector (CBM-CFS3) modelling framework developed by Natural Resources Canada to assess the impacts of our forests on carbon. This is the national standard for reporting on forest carbon.

356K

Metric tonnes of CO2 projected to be removed over the project's lifetime.

Carbon Budget Model of the Canadian Forest Sector is an aspatial, stand- and landscape-level modelling framework used for international reporting of the forest carbon balance of Canada's managed forest (NRCAN, 2024).

Purpose

| UN SDG 13 - Climate Action

"...For over 100 years, the federal government provided farmers across the prairies with trees for shelterbelts, protecting them from harsh elements and improving crop conditions. However, Siksika Nation and many other First Nations were not given access to these trees or the numerous benefits they offered.

Today, Siksika Nation is experiencing the impact of climate change firsthand. Living in a valley with little to no natural protection from extreme weather, the community is increasingly vulnerable."

Eldon Weasel Child, Siksika Nation Knowledge Keeper

For the Siksika Nation Community Shelterbelt Project, the Carbon Budget Model of the Canadian Forest Sector (CBM-CFS3) was not directly applicable, as it was developed for forest ecosystems and is not calibrated for agricultural soils where this project is situated. Recognizing the need for accurate projections of carbon sequestration, the project team sought support from carbon modeling experts. However, efforts to secure external expertise were unsuccessful.

To address this gap and ensure continuity in climate impact estimation, preliminary carbon sequestration calculations were completed using ChatGPT, based on best available data and species-specific estimates. These values are documented in Appendix D - Carbon Sequestration Calculations, which provides a detailed carbon forecast for Year 1, Phase 1 of the planting program; (based on a 150 year calculation).

Currently, the total project carbon estimate assumes that the additional 800,000 seedlings scheduled for future phases will sequester carbon at rates proportionate to the 2024 planting cohort. This assumption will be refined as field monitoring data and site-specific modeling capacity improve—supporting more accurate climate impact reporting in future project phases and contributing to nature-based climate solutions under SDG 13.

Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

Project Forest provides our partners and the wider community with the opportunity to participate in educational activities through our Community and Corporate Outreach Program. Experiencing nature in an educational and interactive way enriches knowledge, fosters a connection with the environment, promotes well-being, and encourages responsible environmental behaviour. These are some of the engagement activities we conducted in 2024:

Purpose

| UN SDG 13 - Climate Action

Lunch and Learns, Keynote Presentations and Panel Discussions

- Overview of the rewilding process, our projects, and stories of community impact
- Stakeholder project impacts and opportunity to engage with the Project Forest team

Corporate Tree Planting Events

- In-person, hands-on volunteering opportunities for Silver, Gold and Platinum financial partners
- Educational talks around seedling physiology, forest succession, tree planting technique, tree planting survey methodology, seed collection, plant identification, and traditional plant uses
- On **October 22, 2023 our Sikisika First Tree Planted Celebration** took place, and we planted 7,020 trees during the corporate planting.

Indigenous Engagement

- Opportunity to learn from Indigenous Knowledge Keepers and Elders in various capacities from presentations, interviews and talks, to one-on-one exchanges at our Corporate Planting Events and Annual Partner Celebration

Podcast, radio, tv and webinar interview

- Overview of the rewilding process for general audiences
- Discussions of more in-depth topics such as working with Indigenous communities, operating a non-profit, and sustainable forest practices

Annual Partner Celebration

- Presentations featuring a wide range of speakers from the Project Forest community
- Focus on Indigenous reconciliation through rewilding, sustainable business practices, and community investment

Community Engagement

- On June 18, 2024, Project Forest coordinated a large-scale community seedling give away at Siksika Nation, during which 6,795 native seedlings were gifted to Nation members. The objective was to provide five seedlings per household to encourage local stewardship and participation in landscape restoration efforts. These annual seedling giveaways will continue throughout the life of the project to foster sustained community involvement and ecological awareness.
- On June 27, 2023, a Sweetgrass Ceremony and community engagement session was held to ceremonially launch the project. The event was led by Siksika Nation members and included traditional ceremonies, a sharing circle focused on project dialogue and cultural knowledge exchange, and the distribution of sweetgrass to schools and participating Nation members. These actions support deep, culturally grounded engagement and ensure that restoration efforts align with the values, knowledge, and leadership of the community.

21

Project Funding Partners

Siksika Nation First tree Planted Celebration

Purpose

| UN SDG 11 - Sustainable Cities and Communities

Goal: Make cities and human settlements inclusive, safe, resilient and sustainable

Matching ESG Goals:

- Generating social & economic growth
- Advancing health & wellbeing
- Developing deeply ingrained Indigenous relationships

Shelterbelts can have a positive impact on communities through creating safer, resilient, and sustainable natural spaces.

Target 11.5: Significantly reduce the number deaths and the number of people affected and substantially decrease the direct economic losses relative to global gross domestic product caused by disasters, including environmental (water, wind) disasters.

The creation of community shelterbelts buffers roads, providing privacy and reducing exposure to dust and traffic; enhancing livability, safety, and sustainable community design.

Community health incluldes shade, reduced traffic noise, safer winter driving, and overall improved living conditions.

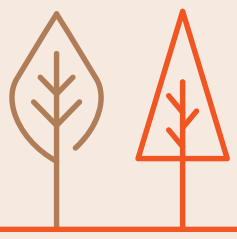
Benefits, including:

- Shelter from the wind and snow in the winter
- Shade in the summer
- Improve road conditions near homes
- Privacy from the vehicle traffic
- Preserve topsoil within the agricultural regions of the Nation
- Safer winter driving conditions through capturing snow drifts

Community shelterbelts create natural barriers from roads, shield homes from heavy winds, as well as making driving conditions safer in dangerous weather conditions.

1M

Seedlings to be planted over the life of the project



Purpose

| UN SDG 11 - Sustainable Cities and Communities

Indicator 11.a.1: Number of countries that have national urban policies or regional development plans that (a) respond to population dynamics; (b) ensure balanced territorial development; and (c) increase local fiscal space

When working with Indigenous communities, Project Forest offers the first right of refusal for site preparation and maintenance work to the Nation. Rewilding projects require labour to complete, including but not limited to:

- Mechanical site preparation
- Seed collection
- Vegetation management
- Survival assessment survey and data collection
- Cover crop deployment
- Construction work

By investing in rewilding, Project Forest funding partners are creating employment opportunities. The income earned by individuals through these jobs can have a positive economic impact and expand **local fiscal space**.

For the 2024 Community Shelterbelt Program, we hired tree planters and watering contractors (post planting) for this project.
The employment opportunity was as follows:

Table 4: Local Contractors Hired

Employment Opportunity	Total Hours (Combined)	Total Earnings
Tree Planters (x3)	47 Hours	$1,468.75
Watering Contractors (2 crews of 2 people)	2,688 Hours	$80, 640.00
Totals	2,735 Hours	$82, 108.75

As future phases of the Siksika Nation Community Shelterbelt Project are implemented, local contractors from Siksika Nation will continue to be retained to carry out post-planting maintenance activities, specifically the irrigation of the community shelterbelts during the first three growing seasons following establishment.

In addition, Tree Time Services Inc., the tree planting contractor for the project, will provide seasonal employment opportunities for Siksika Nation members during planting periods, supporting both local economic development and skills training in ecological restoration practices.

Positive Impact

| UN SDG 3 - Good Health and Well-Being

Goal: Ensure healthy lives and promote well-being for all, at all ages.

Planting trees can have several positive impacts on ensuring healthy lives and promoting well-being for all ages.

Target 3.9: By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

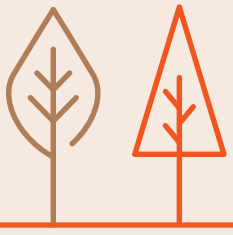
Trees act as natural air filters by absorbing pollutants and particulate matter from the atmosphere. They remove harmful gases by absorbing them through their leaf stomata, filtering these chemicals from the air. Particulate matter is intercepted by the tree's surfaces. When it rains, the particles are washed off and carried to the ground. Planting trees can help improve air quality, by reducing the exposure of communities to harmful pollutants. (Nowak et al., 2014)

In addition to improving air quality, trees provide opportunities for people to connect with nature, enjoy recreational activities, and experience the positive physical and mental health effects of spending time outdoors. The community will have access to nutritious food bearing plants and shrubs, promoting physical wellness and good health. They also provide various ecosystem services that indirectly contribute to our health and well-being.

Some of the important ecological services provided by shelterbelts include:

- cleaning water through water filtration
- cleaning air through oxygen production and absorption of pollutants
- enhancing soils and restoration of nutrients through the inclusion of food bearing plants and shrubs
- absorbing CO2 from the atmosphere
- expanding biodiversity due to increased biomass of leaf litter

These services all directly impact human health and well-being.



Positive Impact

| UN SDG 2 - Zero Hunger

Goal: **End hunger, achieve food security and improved nutrition and promote sustainable agriculture.**

Planting food bearing shrubs has an important impact on addressing hunger, achieving food security, improving nutrition, and promoting sustainable agriculture.

Target 2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

On June 18, 2024, Project Forest hosted a seedling giveaway at Siksika Nation which included a community lunch. 6,795 seedlings (5 total per household) were given away, along with instructions for planting. Any extra seedlings were donated to Blackfoot Crossing and Old Sun's College.

6,795

Food bearing seedlings planted

The list of seedlings was as follows:

- Smokey Saskatoon (570)
- Wild Red Raspberry (130)
- Northline Saskatoon (3,575)
- Snowy Mountian Ash (2,520)

Siksika Seedling Giveaway

Partner

| Funding Partners

Project Forest Siksika First Nation

Our work is not possible without you.

Thank you to our funding partners!

Diamond Willow

PEMBINA

Platinum Forest

Nutrien

ATB

THE S.M. BLAIR FAMILY FOUNDATION

cenovus ENERGY

KPMG

ALBERTA ecotrust

TC Energy

Gold Woodland

TIDEWATER RENEWABLES

CLRA | ACRSD ALBERTA CHAPTER

Aircom Instrumentation Ltd.

Silver Orchard

ENVERUS

EllisDon

Bronze Grove

INTELLIGENT LEARNING RENERT

PTAC PETROLEUM TECHNOLOGY ALLIANCE CANADA

IKEA

the HIVE PRODUCT MARKETING

Critical Mass.

RZE

AUTUMN GOOSE COACHING

HARVEST POINTE ANIMAL HOSPITAL

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Appendix A - Work Scope

Project Forest Work Scope for Tree Time Services - Project Forest Siksika Nation Community Shelterbelt Program

Project Location & Background

The Project Forest Siksika Nation Community Shelterbelt Program is found within the reserve boundaries of Siksika Nation (SN) and can be found here: https://goo.gl/maps/cDRLrqHYnBNNy9eo6

The full project area is not yet known. In the words of the community members from SN, they "are desperate for trees." As their Nation is mostly occupied by native prairie, which is rapidly becoming an ecosystem that is more and more rare, it was a challenge to determine the best place to plant trees while:

1. Maintaining the ecological values and importance of the native prairie lands found within SN
2. Creating a significant project that will provide positive human impacts and ecological impacts to SN

After touring SN, it was determined that during the days of the Alberta Prairie Shelterbelt program their Nation, among other First Nation communities in the non-forested regions of Alberta were not supplied with the trees that went to western farmers and landowners. This oversight has resulted in a tremendous number of trees surrounding SN, but very few within the boundaries of SN. This project will bring parody to the community members of SN compared to the surrounding landscape.

Three site limiting factors have been identified throughout the Nation:

1. Soil compaction
2. Drought like conditions
3. Salt impacts from winter de-icing

The project plan will need to identify ways to mitigate all of these site limiting factors to ensure project success. Mitigation strategies like a watering truck and/or temporary drip irrigation lines should be considered for the soil moisture, a soil sampling program should be completed along the ditch lines of all roads that are salted in the winter (soil sample intervals of surface, 15cm and 30cm) and a mechanical site preparation strategy will be required to ensure plantable microsites for all trees. If and when areas of concern are noted and a mitigation strategy is not possible, they should be removed from the plantable project area.

Additionally, it is expected that a number of areas that could be planted will have to be dropped due to the presence of underground facilities. As the planners design the project, all planting areas should be designed under the assumption that there are no underground facilities. A ground disturbance package will be created and once verified, areas of concern will then be removed from the site plan. Finally, there are overhead powerlines through the nation that will need to be avoided. The utility company will need to be consulted to determine how close trees are allowed to be planted. A safe

buffer should be designed around all powerlines. Should short species like, but not limited to raspberry, silver buffalo berry and Canada wild rose be suitable, they can be considered for planting around the powerlines should the utility company approve this strategy.

Project Objectives

The project is broken up into the following shelterbelt programs:

1. Agricultural Shelterbelt
2. Community Shelterbelt
3. Cultural Shelterbelt

The objectives of each type are:

1. Agricultural Shelterbelt
    a. Preserve topsoil within the agricultural regions of the Nation
    b. Making driving conditions safer in the winter by providing a wind barrier to capture snow drift
    c. Create wildlife habitat
    d. Sequestering carbon is a result of doing this work well
2. Community Shelterbelt
    a. Improve human health
    b. Provide privacy from the vehicle traffic
    c. Reduce noise from highway traffic where people live
    d. Provide shelter from the wind and snow in the winter
    e. Provide shade in the summer
    f. Provide foods and medicines for the community
    g. Create wildlife habitat
    h. Sequestering carbon is a result of doing this work well
3. Cultural Shelterbelt
    a. Add a tree component to areas such as the Arbor, museum and school
    b. Provide an aesthetic improvement and privacy as requested by SN
    c. Improve living conditions on the Nation
    d. Improve human health through the addition of trees throughout the Nation/

Shelterbelt Species Designs:

After touring the Nation with a community member, the following Shelterbelt designs were approved:

1. Agricultural Shelterbelt

There are 3 iterations of the Agricultural Shelterbelt designs based on the site limiting factors that have been identified in the field. It may not be feasible to water these shelterbelts and that limiting factor must be considered in all phases of the Agricultural Shelterbelt plan.

The agricultural shelterbelts will be no more than 3 rows wide with 5m between row spacing. They will only consist of traditional shelterbelt tree species. Food bearing, medicinal and culturally significant plants should be avoided in these areas to reduce project cost.

a. Normal Agricultural Shelterbelt
    i. A mixture of the following species can be prescribed based on availability and professional discretion:
        1. Manitoba Maple
        2. Okanese Poplar
        3. Colorado Blue Spruce
        4. Bur Oak
        5. Ponderosa Pine
        6. Scotch Pine

b. Drought Shelterbelt
    i. A mixture of the following species can be prescribed based on availability and professional discretion:
        Row 1: Caragana, Silver buffalo berry
        Row 2: Okanese Poplar, Scotch Pine, Colorado Blue Spruce
        Row 3: Green Ash, Lodgepole

c. Salt Shelterbelt
    i. A mixture of the following species can be prescribed based on availability and professional discretion:
        1. Row 1: Sea buckthorn, silver buffalo berry
        2. Row 2 and 3: Ponderosa Pine, Russian Olive, Bur Oak, Manitoba Maple, Mountain Ash, Hawthorn

Caragana is a preferred species on SN. There are examples through SN of caragana thriving.

It should be noted that in many areas of southern Alberta, Russian Olive is considered an invasive species. That said, it may be one of the few trees in a 3-row shelterbelt design that can thrive in these challenging conditions. For that reason, it is on the list and should only be prescribed if there are no other suitable trees for the project design. The only risk of spread for the Russian Olive is in the unlikely event that a seed finds its way into a waterway and those seeds drain into the Bow River, there are not many waterways through SN. Additionally, all of these shelterbelts will be along agricultural fields and will be maintained annually during harvest. They will not be allowed to encroach beyond their planting boundaries.

2. Community Shelterbelt

Community Shelterbelts will provide the community members with the food bearing, medicinal and culturally significant plants. They have been selected for deployment in these areas as these shelterbelts will be closest to where the people live.

Depending on how much room there is to instal the shelterbelts the species selection will change. There are 5 iterations of the Community Infrastructure Shelterbelt design. Each row will be 5 meters apart, in row spacing will be determined based on species and best practices. Field survey may be required to determine how many rows of trees can be planted in each location.

1 row - Caragana
2 row - Caragana & Okanese poplar (or suitable substitute based on seedling availability)
3 row - Caragana, Okanese poplar, Colorado Blue Spruce
4 row - Caragana, Saskatoon, Okanese poplar, Colorado Blue Spruce
5 row - Caragana, Raspberry, Saskatoon, Okanese poplar, Colorado Blue Spruce

At a yet to be determined time, additional food bearing, medicinal and culturally significant plants will be planted in-between the rows. The species selection process will be completed through a survey of the community members in each project location. Project Forest will share the list of plants identified by Siksika Nation as food bearing, medicinal and culturally significant and a community engagement plan will be developed in conjunction with the Nation.

In addition to the shelterbelts, community members will be provided up to 10 trees per household based on a list of available and suitable species provided by TTSI. The soils where people live are very compacted, it is likely that a soil auger planting program will be required to help community members instal the trees. A maintenance and watering training program should be developed. Fertilizer tea bags or stakes should also be considered. This phases of the project would be considered a municipal planting project with 1 and 2 year old trees.

3. Cultural Shelterbelt

Several culturally and aesthetically significant sites were identified for tree planting during the tour. Each area requires a unique planting plan, the areas currently scheduled for planting are as follows:

- Treaty 7 Signing Site
- The Gravel Pit Row 1 - Caragana Row 2 - Green Ash Row 3 - Colorado Blue Spruce
- The Siksika Nation Arbor
- The cemetery
- The elementary school
- The museum

- Urban municipal services area
- Waste transfer station (high priority)

As the project evolves, additional areas will be identified.

Project Planning

Project Forest uses Matidor for all our project planning. TTSI staff will be provided access to the platform and training on how to design the project and create the tasks. This data and this platform will be used to monitor and manage each shelterbelt as a unique polygon and track successes and failures as observed.

While the majority of the planning work left is a desktop exercise, field work may be required for ground truthing and is a reasonable expense and task to complete this work.

Shelterbelt Design

All areas scheduled for shelterbelt planting should be prepared using industry best practices. A biodegradable mulch should be used to mitigate vegetative competition and keep the soil moisture high.

Assessment Protocols

Project Forest requires an assessment protocol to be developed to define project success. The current Project Forest assessment manual has been designed to monitor traditional rewilding work and is not an appropriate standard to determine project success for a shelterbelt project. An annual inspection should be included in this document.

Monitoring and Maintenance

As part of the project design, a maintenance plan, watering plan and monitoring plan including a fill plant will be required.

As part of the project maintenance, manual vegetation management should be considered for up to the first 4 years after planting. All vegetation should be discing back into the soil, **just mowing will not be an acceptable method of vegetation management.**

Project Forest will require a detailed watering protocol. Professional guidance is required regarding how many year(s) watering will be required or if there is a height and performance standard required before watering is no longer needed.

Desired Plating Window

This is a multi year, multi phase project. The first planting of coniferous trees should occur during the fall 2023 planting season. All deciduous trees and shrubs should be planted starting in the spring of 2024.

When deploying deciduous trees and shrubs, they must only be planted as spring dormant seedlings, and they should be planted as early into the planting season as possible.

Expected Deliverables

A Shelterbelt plan for full implementation. This would include the following:

- Identify site limiting factors and comment on them
- Mechanical Site Preparation plan and equipment list with estimated total hours required
- Ground Disturbance package (all areas where underground facilities are identified will be removed from the project plan. When designing planting areas, assume there are no underground facilities).
- Total project area in hectares
- Total seedling numbers per species
- Site plan in Matidor - all polygons are to be provided unique identifiers and number and species of seedling shall be tracked per polygon in Matidor.
- Annual monitoring and vegetation management plan
- Budget for fill plant of 25% across full project area
- Final survey plan
- Site specific assessment standard (Project Forest Assessment Survey to be used as the guideline and then customized to the project based on the project design).

Timelines

In preparation for a 2 billion tree submission due on the 13th of January, this a final plan is requested by end of day January 6 2023.

Please let us know what is a realistic timeline based on staff availability.

Appendix B - Planting Report

Project Forest – Siksika Nation

Siksika Nation Community Shelterbelt As-Planted Report

January 21, 2025

Prepared by:

TreeTime SERVICES INC.

Table of Contents

TreeTime SERVICES INC.

1 Project Implementation Summary

Site location:	Siksika Nation
Site Prep Dates:	April 22, 2024 - April 28, 2024
Planting Dates:	May 1, 2024 - May 16, 2024
Number of Trees Planted:	27,785
Number of Shrubs Planted:	96,090
Number of km Planted:	93.0 km
Subcontractors Involved:	Producers Equipment Co. [Site prep] Ember Archaeology [Historical Resource Pedestrian Assessment] Tree Time Services [Project management, seedlings, and planting] Siksika Nation – four Nation member tree planters

Planted Species Composition

Species	**Quantity**
Blue Spruce	6,840
Scots Pine	2,970
Ponderosa Pine	1,620
Okanese Poplar	11,245
Manitoba Maple	5,110
Common Caragana	88,390
Sea Buckthorn	2,780
Silver Buffalo Berry	1,320
Green Ash	3,600

Appendix A: As – Planted Maps

N

Siksika Community
2024 Planted Shelterbelts
Map 1

Project Partners:

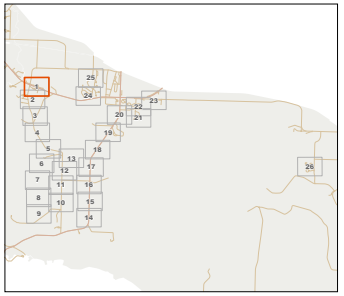
Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
CW	Blue Spruce	50
CW	Okanese Poplar	70
CW	Silver Buffaloberry	110
DI	Okanese Poplar	780
DI	Silver Buffaloberry	350
DK	Blue Spruce	200
DK	Okanese Poplar	270
DK	Silver Buffaloberry	400
EP	Caragana	210
EP	Okanese Poplar	20
ET	Caragana	2740
ET	Ponderosa Pine	410
ET	Okanese Poplar	550
FA	Caragana	170
FA	Blue Spruce	50
FA	Okanese Poplar	60

* Areas along the highway are not precise. Site prep did not use GPS tracks.



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Siksika Community
2024 Planted Shelterbelts
Map 2

Project Partners:

Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
CW	Blue Spruce	50
CW	Okanese Poplar	70
CW	Silver Buffaloberry	110
DA	Caragana	2150
DA	Blue Spruce	320
DA	Okanese Poplar	430
DK	Blue Spruce	200
DK	Okanese Poplar	270
DK	Silver Buffaloberry	400
EL	Caragana	460
EL	Scots Pine	120
EL	Manitoba Maple	150
EQ	Caragana	370
EQ	Blue Spruce	60
EQ	Green Ash	80

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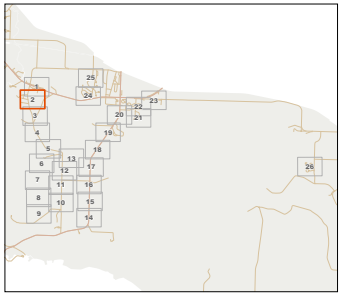

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Siksika Community
2024 Planted Shelterbelts
Map 3

Project Partners:

Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
CD	Caragana	1580
CD	Scots Pine	240
CD	Okanese Poplar	320
CI	Caragana	150
CI	Blue Spruce	30
CI	Okanese Poplar	40
CJ	Ponderosa Pine	130
CJ	Okanese Poplar	170
CR	Caragana	2380
CR	Blue Spruce	370
CR	Okanese Poplar	490
CU	Caragana	1450
CU	Blue Spruce	220
CU	Okanese Poplar	290
DA	Caragana	2150
DA	Blue Spruce	320
DA	Okanese Poplar	430
EG	Caragana	410
EG	Scots Pine	70
EG	Manitoba Maple	90

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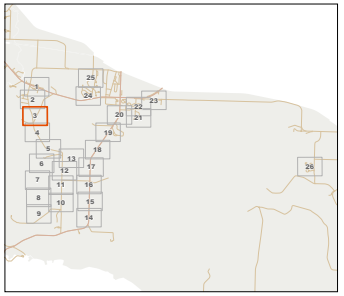

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Siksika Community
2024 Planted Shelterbelts
Map 4

Project Partners:

Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
BJ	Caragana	2080
BJ	Blue Spruce	310
BJ	Okanese Poplar	420
BK	Caragana	1320
BK	Blue Spruce	190
BK	Okanese Poplar	270
CI	Caragana	150
CI	Blue Spruce	30
CI	Okanese Poplar	40
CM	Caragana	210
CM	Blue Spruce	40
CM	Okanese Poplar	50

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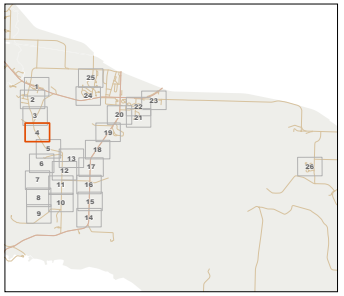

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Siksika Community
2024 Planted Shelterbelts
Map 5

Project Partners:

Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
BK	Caragana	1320
BK	Blue Spruce	190
BK	Okanese Poplar	270
BN	Caragana	1580
BN	Scots Pine	240
BN	Okanese Poplar	320
BQ	Caragana	510
BQ	Scots Pine	90
BQ	Okanese Poplar	110
BR	Caragana	1430
BR	Scots Pine	210
BR	Okanese Poplar	280
BV	Caragana	1490
BV	Scots Pine	230
BV	Okanese Poplar	300
BY	Caragana	1450
BY	Scots Pine	230
BY	Okanese Poplar	300
DX	Caragana	310
DX	Scots Pine	50
DX	Okanese Poplar	70

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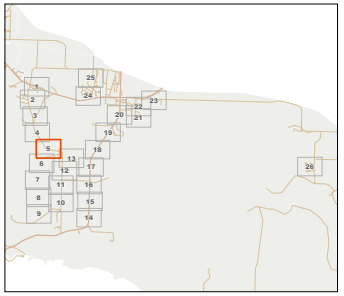

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Siksika Community
2024 Planted Shelterbelts
Map 6

Project Partners:

Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
AX	Caragana	3670
AX	Blue Spruce	550
AX	Okanese Poplar	710
BN	Caragana	1580
BN	Scots Pine	240
BN	Okanese Poplar	320
BQ	Caragana	510
BQ	Scots Pine	90
BQ	Okanese Poplar	110
BR	Caragana	1430
BR	Scots Pine	210
BR	Okanese Poplar	280
BV	Caragana	1490
BV	Scots Pine	230
BV	Okanese Poplar	300
BY	Caragana	1450
BY	Scots Pine	230
BY	Okanese Poplar	300

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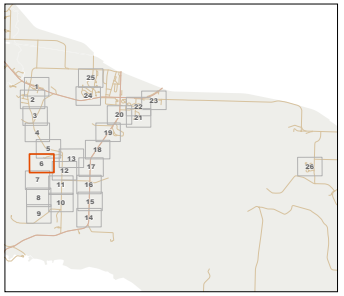

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Siksika Community
2024 Planted Shelterbelts
Map 7

Project Partners:

Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
AK	Caragana	5300
AK	Blue Spruce	810
AK	Okanese Poplar	1070
AO	Caragana	520
AO	Blue Spruce	80
AO	Okanese Poplar	110
AX	Caragana	3670
AX	Blue Spruce	550
AX	Okanese Poplar	710

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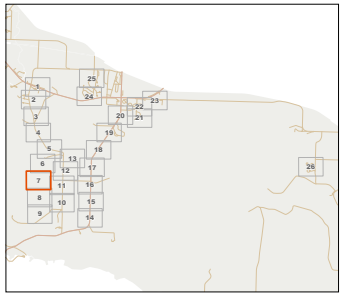

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Siksika Community
2024 Planted Shelterbelts
Map 8

Project Partners:

Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
AK	Caragana	5300
AK	Blue Spruce	810
AK	Okanese Poplar	1070

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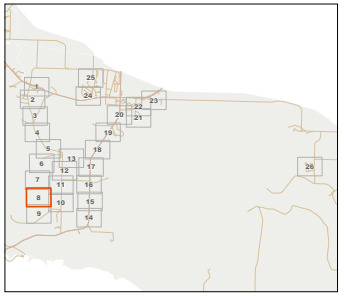

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Siksika Community
2024 Planted Shelterbelts
Map 9

Project Partners:

Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
AC	Caragana	170
AC	Blue Spruce	30
AC	Okanese Poplar	40
AK	Caragana	5300
AK	Blue Spruce	810
AK	Okanese Poplar	1070
AL	Caragana	360
AL	Blue Spruce	50
AL	Okanese Poplar	70
AM	Caragana	270
AM	Scots Pine	40
AM	Okanese Poplar	60
BG	Caragana	2820
BG	Blue Spruce	270
BG	Scots Pine	150
BG	Okanese Poplar	560
BH	Caragana	400
BH	Blue Spruce	70
BH	Okanese Poplar	80
BI	Caragana	1060
BI	Scots Pine	160
BI	Okanese Poplar	220

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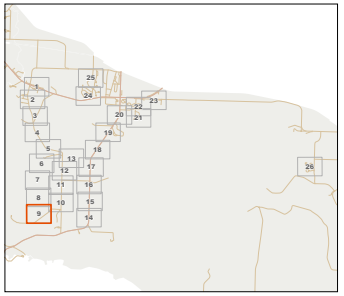

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Siksika Community
2024 Planted Shelterbelts
Map 10

Project Partners:

Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
AJ	Caragana	1610
AJ	Scots Pine	250
AJ	Okanese Poplar	330
AN	Caragana	680
AN	Blue Spruce	110
AN	Okanese Poplar	140
AO	Caragana	1360
AO	Blue Spruce	200
AO	Okanese Poplar	270

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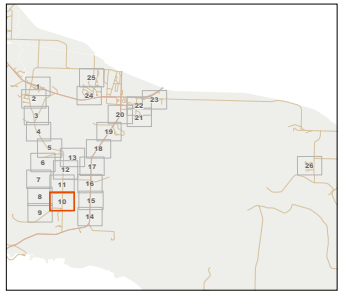

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Siksika Community
2024 Planted Shelterbelts
Map 11

Project Partners:

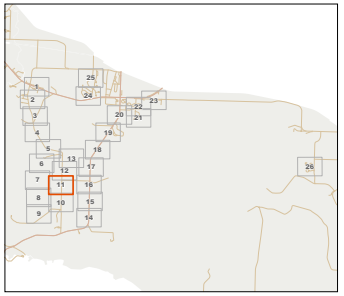
Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
AN	Caragana	680
AN	Blue Spruce	110
AN	Okanese Poplar	140
AP	Caragana	540
AP	Blue Spruce	80
AP	Okanese Poplar	110
AQ	Caragana	1360
AQ	Blue Spruce	200
AQ	Okanese Poplar	270
AT	Caragana	1570
AT	Blue Spruce	240
AT	Okanese Poplar	320
AV	Caragana	240
AV	Blue Spruce	30
AV	Okanese Poplar	50
AW	Caragana	330
AW	Blue Spruce	50
AW	Okanese Poplar	70
BF	Caragana	3390
BF	Blue Spruce	520
BF	Okanese Poplar	680

* Areas along the highway are not precise. Site prep did not use GPS tracks.



Date Printed: June 10, 2024
Spatial Reference
Name: NAD 1983 UTM Zone 12N
Datum: North American 1983
Created by: Tree Time Services Inc.
Scale: 1:2,000

TreeTime SERVICES INC.

0 50 100 200 Meters

N

Siksika Community
2024 Planted Shelterbelts
Map 12

Project Partners:

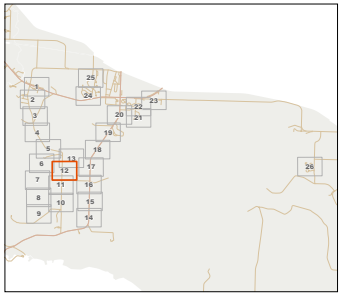
Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
BF	Caragana	3390
BF	Blue Spruce	520
BF	Okanese Poplar	680
BX	Caragana	3050
BX	Blue Spruce	460
BX	Okanese Poplar	610

* Areas along the highway are not precise. Site prep did not use GPS tracks.



Date Printed: June 10, 2024
Spatial Reference
Name: NAD 1983 UTM Zone 12N
Datum: North American 1983
Created by: Tree Time Services Inc.
Scale: 1:2,000

TreeTime SERVICES INC.

0 50 100 200 Meters

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Siksika Community
2024 Planted Shelterbelts
Map 13

Project Partners:

Project Forest

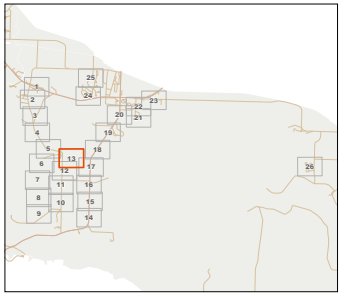
Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
BF	Caragana	3390
BF	Blue Spruce	520
BF	Okanese Poplar	680
BN	Caragana	1580
BN	Scots Pine	240
BN	Okanese Poplar	320
BO	Caragana	2480
BO	Blue Spruce	380
BO	Okanese Poplar	500
BP	Caragana	690
BP	Blue Spruce	110
BP	Okanese Poplar	140
BV	Caragana	1490
BV	Scots Pine	230
BV	Okanese Poplar	300
BW	Caragana	120
BW	Scots Pine	30
BW	Okanese Poplar	30

Buffer	Species	Seed Number
BX	Caragana	3050
BX	Blue Spruce	460
BX	Okanese Poplar	610
CA	Caragana	1010
CA	Scots Pine	70
CA	Okanese Poplar	190
CC	Caragana	2160
CC	Scots Pine	370
CC	Okanese Poplar	490
DW	Caragana	310
DW	Blue Spruce	50
DW	Okanese Poplar	60
DX	Caragana	310
DX	Scots Pine	50
DX	Okanese Poplar	70
DY	Caragana	1040
DY	Blue Spruce	160
DY	Okanese Poplar	210

* Areas along the highway are not precise. Site prep did not use GPS tracks.



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Datum: North American 1983
Created by: Tree Time Services Inc.
Scale: 1:2,000

TreeTime SERVICES INC.

0 50 100 200 Meters

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Siksika Community
2024 Planted Shelterbelts
Map 14

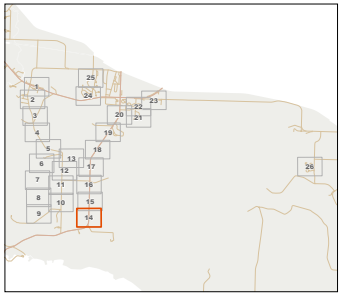
Project Partners:

Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

* Areas along the highway are not precise. Site prep did not use GPS tracks.



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Datum: North American 1983
Created by: Tree Time Services Inc.
Scale: 1:2,000

TreeTime SERVICES INC.

0 50 100 200 Meters

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Siksika Community
2024 Planted Shelterbelts
Map 15

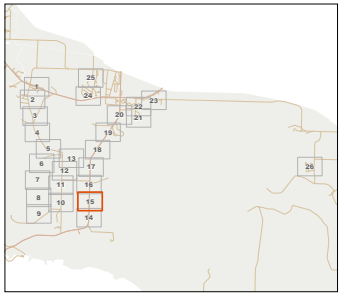
Project Partners:

Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

* Areas along the highway are not precise. Site prep did not use GPS tracks.



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Datum: North American 1983
Created by: Tree Time Services Inc.
Scale: 1:2,000

TreeTime SERVICES INC.

0 50 100 200 Meters

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Siksika Community
2024 Planted Shelterbelts
Map 16

Project Partners:

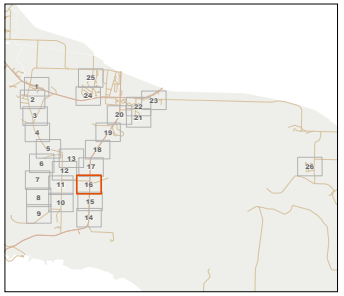
Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
AS	Caragana	300
AS	Blue Spruce	50
AS	Okanese Poplar	60
AU	Caragana	750
AU	Blue Spruce	120
AU	Okanese Poplar	150
AY	Caragana	710
AY	Blue Spruce	110
AY	Okanese Poplar	150
AZ	Caragana	2960
AZ	Ponderosa Pine	450
AZ	Maple	600
BA	Caragana	700
BA	Blue Spruce	110
BA	Okanese Poplar	140
BD	Caragana	1770
BD	Blue Spruce	410
BD	Okanese Poplar	540
BD	Sea Buckthorn	280
ED	Caragana	610
ED	Ponderosa Pine	100
ED	Manitoba Maple	130
EE	Caragana	1620
EE	Blue Spruce	80
EE	Ponderosa Pine	150
EE	Manitoba Maple	310

* Areas along the highway are not precise. Site prep did not use GPS tracks.



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Datum: North American 1983
Created by: Tree Time Services Inc.
Scale: 1:2,000

TreeTime SERVICES INC.

0 50 100 200 Meters

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Siksika Community
2024 Planted Shelterbelts
Map 17

Project Partners:

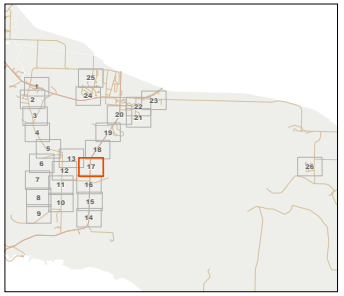
Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
AZ	Caragana	2960
AZ	Ponderosa Pine	450
AZ	Maple	600
BD	Caragana	1770
BD	Blue Spruce	410
BD	Okanese Poplar	540
BD	Sea Buckthorn	280
BO	Caragana	2480
BO	Blue Spruce	380
BO	Okanese Poplar	500

* Areas along the highway are not precise. Site prep did not use GPS tracks.



Date Printed: June 10, 2024
Spatial Reference
Name: NAD 1983 UTM Zone 12N
Datum: North American 1983
Created by: Tree Time Services Inc.
Scale: 1:2,000

TreeTime SERVICES INC.

0 50 100 200 Meters

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Siksika Community
2024 Planted Shelterbelts
Map 18

Project Partners:

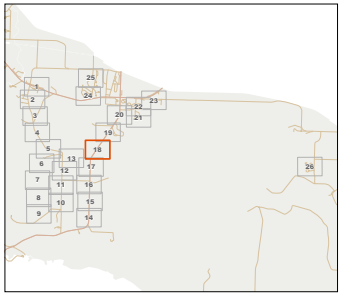
Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
AG	Ponderosa Pine	220
AG	Manitoba Maple	300
AG	Silver Buffaloberry	440
CF	Caragana	2080
CF	Ponderosa Pine	310
CF	Okanese Poplar	420
CG	Caragana	790
CG	Ponderosa Pine	120
CG	Okanese Poplar	160

* Areas along the highway are not precise. Site prep did not use GPS tracks.



Date Printed: June 10, 2024
Spatial Reference
Name: NAD 1983 UTM Zone 12N
Datum: North American 1983
Created by: Tree Time Services Inc.
Scale: 1:2,000

TreeTime SERVICES INC.

0 50 100 200 Meters

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Siksika Community
2024 Planted Shelterbelts
Map 19

Project Partners:

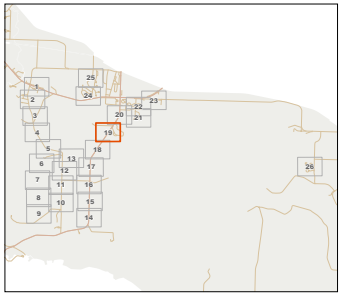
Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
AG	Ponderosa Pine	220
AG	Manitoba Maple	300
AG	Silver Buffaloberry	440
AH	Caragana	270
AH	Ponderosa Pine	390
AH	Green Ash	60
AI	Ponderosa Pine	10
AI	Okanese Poplar	20
AI	Sea Buckthorn	40
CG	Caragana	790
CG	Ponderosa Pine	120
CG	Okanese Poplar	160
CK	Ponderosa Pine	30
CK	Okanese Poplar	30
CK	Sea Buckthorn	50
CL	Ponderosa Pine	60
CL	Sea Buckthorn	120
CS	Ponderosa Pine	50
CS	Okanese Poplar	70
CS	Sea Buckthorn	110
EH	Caragana	1760
EH	Ponderosa Pine	250
EH	Green Ash	340

* Areas along the highway are not precise. Site prep did not use GPS tracks.



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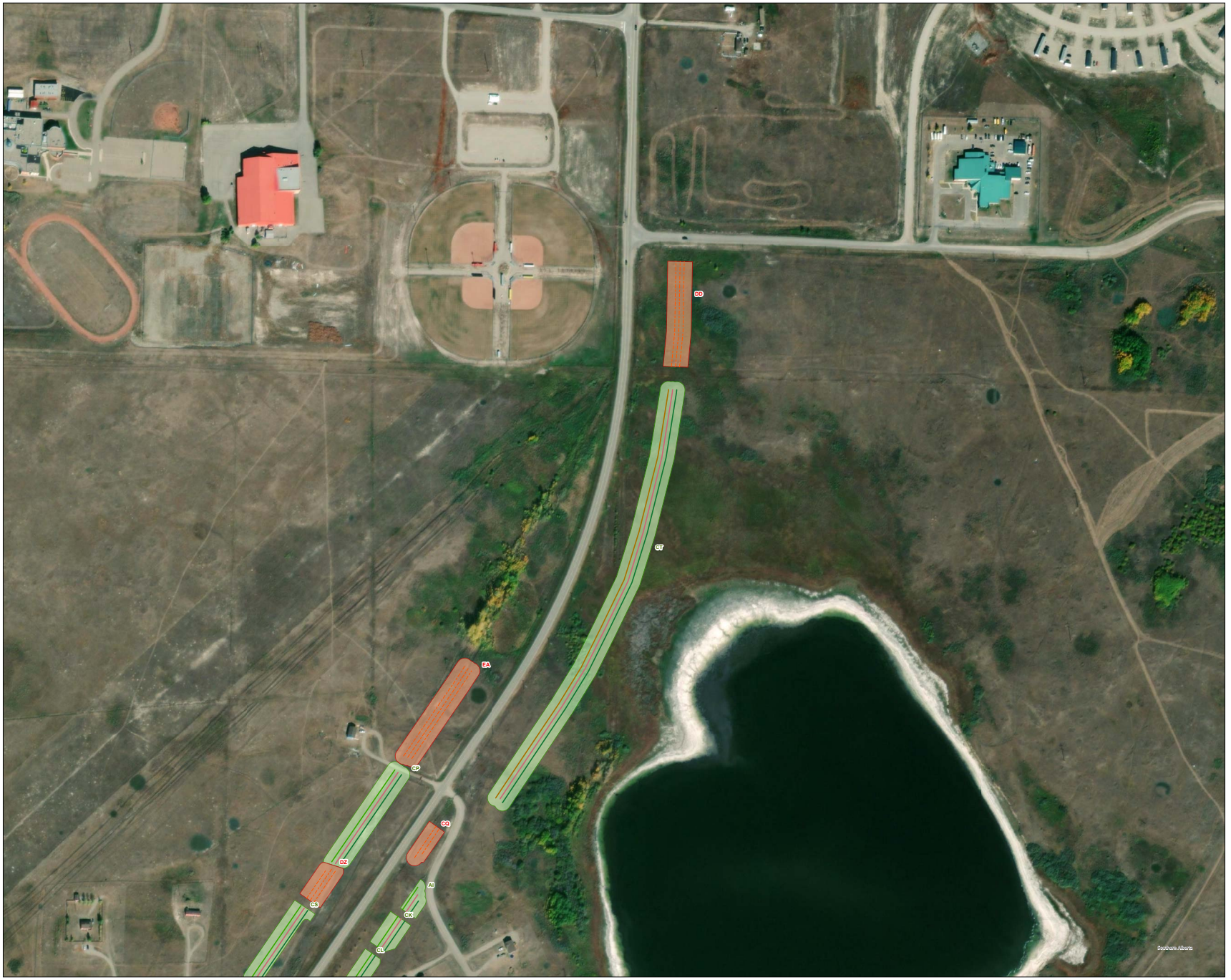
TreeTime SERVICES INC.

0 50 100 200 Meters



N

Siksika Community
2024 Planted Shelterbelts
Map 20

Project Partners:

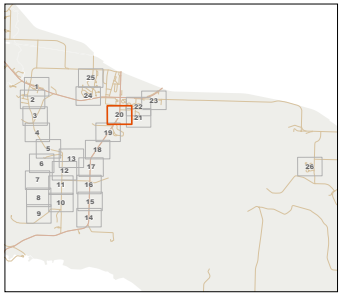
Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
AI	Ponderosa Pine	10
AI	Okanese Poplar	20
AI	Sea Buckthorn	40
CK	Ponderosa Pine	30
CK	Okanese Poplar	30
CK	Sea Buckthorn	50
CP	Ponderosa Pine	70
CP	Okanese Poplar	90
CP	Sea Buckthorn	140
CS	Ponderosa Pine	50
CS	Okanese Poplar	70
CS	Sea Buckthorn	110
CT	Caragana	1820
CT	Ponderosa Pine	280
CT	Okanese Poplar	370

* Areas along the highway are not precise. Site prep did not use GPS tracks.



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Spatial Reference
Name: NAD 1983 UTM Zone 12N
Datum: North American 1983
Created by: Tree Time Services Inc.
Scale: 1:2,000

TreeTime SERVICES INC.

0 50 100 200 Meters

N

Siksika Community
2024 Planted Shelterbelts
Map 21

Project Partners:

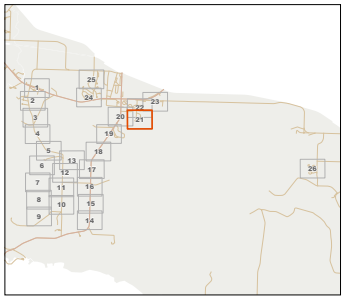
Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
DS	Caragana	2030
DS	Ponderosa Pine	300
DS	Manitoba Maple	410
EI	Caragana	1870
EI	Ponderosa Pine	300
EI	Manitoba Maple	390

* Areas along the highway are not precise. Site prep did not use GPS tracks.



Date Printed: June 10, 2024
Spatial Reference
Name: NAD 1983 UTM Zone 12N
Datum: North American 1983
Created by: Tree Time Services Inc.
Scale: 1:2,000

TreeTime SERVICES INC.

0 50 100 200 Meters

N

Siksika Community
2024 Planted Shelterbelts
Map 22

Project Partners:

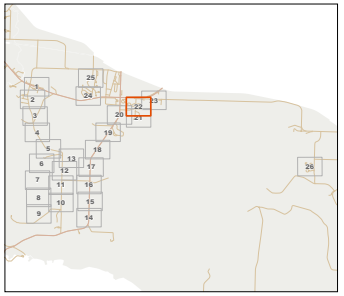
Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
CY	Caragana	330
CY	Ponderosa Pine	50
CY	Okanese Poplar	70
CZ	Caragana	510
CZ	Ponderosa Pine	80
CZ	Okanese Poplar	110
DE	Caragana	750
DE	Ponderosa Pine	110
DE	Okanese Poplar	150
DG	Caragana	690
DG	Ponderosa Pine	100
DG	Okanese Poplar	140
DJ	Blue Spruce	110
DS	Caragana	2030
DS	Ponderosa Pine	300
DS	Manitoba Maple	410

* Areas along the highway are not precise. Site prep did not use GPS tracks.



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Spatial Reference
Name: NAD 1983 UTM Zone 12N
Datum: North American 1983
Created by: Tree Time Services Inc.
Scale: 1:2,000

TreeTime SERVICES INC.

0 50 100 200 Meters

N

Siksika Community
2024 Planted Shelterbelts
Map 23

Project Partners:

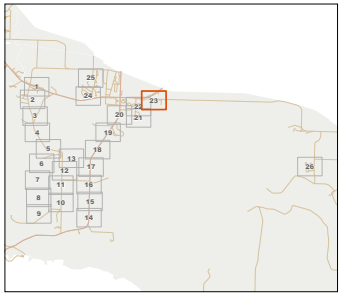
Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
CY	Caragana	330
CY	Ponderosa Pine	50
CY	Okanese Poplar	70
DG	Caragana	690
DG	Ponderosa Pine	100
DG	Okanese Poplar	140
DJ	Caragana	620
DJ	Blue Spruce	110
DJ	Okanese Poplar	130
DP	Caragana	1030
DP	Blue Spruce	160
DP	Okanese Poplar	210
DQ	Caragana	480
DQ	Blue Spruce	80
DQ	Okanese Poplar	100
DS	Caragana	2030
DS	Ponderosa Pine	300
DS	Manitoba Maple	410

* Areas along the highway are not precise. Site prep did not use GPS tracks.



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Spatial Reference
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Datum: North American 1983
Created by: Tree Time Services Inc.
Scale: 1:2,000

TreeTime SERVICES INC.

0 50 100 200 Meters

N

Siksika Community
2024 Planted Shelterbelts
Map 24

Project Partners:

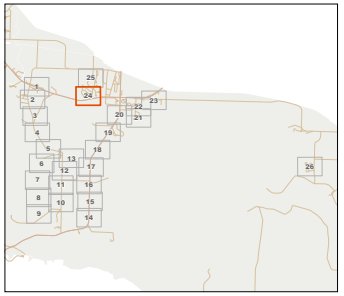
Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
CE	Blue Spruce	170
CE	Okanese Poplar	220
CE	Sea Buckthorn	330
DF	Ponderosa Pine	100
DF	Manitoba Maple	130
DF	Sea Buckthorn	230
DH	Blue Spruce	720
DH	Okanese Poplar	350
DH	Sea Buckthorn	530
EM	Caragana	2290
EM	Blue Spruce	340
EM	Green Ash	450

* Areas along the highway are not precise. Site prep did not use GPS tracks.



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Created by: Tree Time Services Inc.
Scale: 1:2,000

TreeTime SERVICES INC.

0 50 100 200 Meters

N

Siksika Community
2024 Planted Shelterbelts
Map 25

Project Partners:

Project Forest

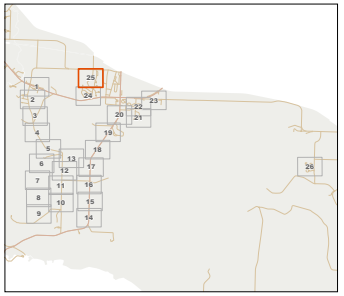
Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
EM	Caragana	2290
EM	Blue Spruce	340
EM	Green Ash	450
ER	Caragana	900
ER	Blue Spruce	120
ER	Green Ash	170
ES	Caragana	950
ES	Ponderosa Pine	150
ES	Green Ash	190
EU	Caragana	440
EU	Ponderosa Pine	70
EU	Green Ash	90
EV	Caragana	370
EV	Ponderosa Pine	60
EV	Green Ash	80

Buffer	Species	Seed Number
EX	Caragana	760
EX	Ponderosa Pine	120
EX	Manitoba Maple	150
EY	Caragana	220
EY	Ponderosa Pine	40
EY	Green Ash	50
EZ	Caragana	900
EZ	Blue Spruce	140
EZ	Green Ash	190
FC	Caragana	240
FC	Ponderosa Pine	40
FC	Green Ash	50
FD	Caragana	190
FD	Ponderosa Pine	30
FD	Green Ash	40

* Areas along the highway are not precise. Site prep did not use GPS tracks.



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Spatial Reference
Name: NAD 1983 UTM Zone 12N
Datum: North American 1983
Created by: Tree Time Services Inc.
Scale: 1:2,000

TreeTime SERVICES INC.

0 50 100 200 Meters

N

Siksika Community
2024 Planted Shelterbelts
Map 26

Project Partners:

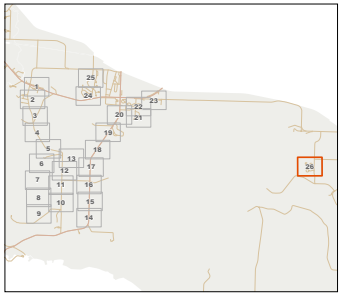
Project Forest

Siksika Nation

- Planted
- Partially Planted
- Not Planted
- Shelterbelt Not Planted
- Caragana Planted
- Coniferous Planted
- Deciduous Planted
- Shrub Planted

Buffer	Species	Seed Number
EF	Caragana	4260
EF	Ponderosa Pine	630
EF	Green Ash	840
EJ	Caragana	510
EJ	Ponderosa Pine	80
EJ	Green Ash	110

* Areas along the highway are not precise. Site prep did not use GPS tracks.



Date Printed: June 10, 2024
Spatial Reference
Name: NAD 1983 UTM Zone 12N
Datum: North American 1983
Created by: Tree Time Services Inc.
Scale: 1:2,000

TreeTime SERVICES INC.

0 50 100 200 Meters

Project Forest Monitoring Assessment Summary Sheet

Project Name	Siksika Shelterbelt Phase 1 Part 1
Applicability	Trajectory of shelterbelt establishment
Landowner	Siksika Nation
Site Location	Phase 1 Part 1
Year Planted	2024
Assessment #:	1

First and last name of qualified surveyors (or as attached):

Alyssa Hamza, Lindsay Dent

Disturbance Areas and areas to be removed from reforestation project area(s):

N/A

Summary of Preventive and Corrective Actions:

Discussions between Siksika Nation and Project Forest are required to discuss:

- Fill plant and species
- Pesticide considerations to manage herbivory of seedlings

Declaration:

I do hereby declare that this submission is a sample of the area that:

a) **Adheres to many of the components required Quality Assessment/Quality Control program, and,**
b) **Includes only surveys that have been conducted according to the methods detailed in the Project Forest –Monitoring Program, and,**
c) **Complies with the requirements for report timing and format.**

Validated/Signed by:	**Registration #**	**Date:**
	1838	August 4, 2025

Print Name:	**Company:**
Lindsay Dent	Tree Time Services Inc.

Appendix C - Site Survey

Afforestation Survey Cover Page			
Project site: Siksika Shelterbelt Phase 1 – Part 1			
Survey Date(s)	October 6 -7, 2024	Planted Length	92.3 km
		Total Length walked	21.8 km

Stocking Calculations

Type of Plot	# ms walked	% Walked	Meet Final Criteria	% of Plots
Agri - Blue Spruce	3465	24.2	0	0
Agri - Pine	2455	25.8	0	0
Agri - Manitoba Maple	400	63.5	0	0
Agri - Okanese Poplar	3600	16.0	0	0
Agri - Sea Buckthorn	530	41.4	0	0
Agri - Caragana	4350	21.1	0	0
Comm - Blue Spruce	675	32.6	0	0
Comm - Ponderosa Pine	2200	40.7	0	0
Comm - Green Ash	1090	27.0	0	0
Comm - Manitoba Maple	950	43.0	0	0
Comm - Okanese Poplar	230	13.1	0	0
Comm - Sea Buckthorn	190	26.4	0	0
Comm - Silver Buffaloberry	120	34.3	0	0
Comm - Caragana	1580	22.6	0	0

Acceptable Stocking Summary

Plot Stocking Status	% of Visited lengths Walked	% Alive
Agri - Blue Spruce	90.6	26.2
Agri - Pine	43.7	20.4
Agri - Manitoba Maple	98.0	34.4
Agri - Okanese Poplar	49.8	18.8
Agri - Sea Buckthorn	69.9	0.4
Agri - Caragana	63.2	2.8
Comm - Blue Spruce	34.4	36.7
Comm - Ponderosa Pine	48.3	53.5
Comm - Green Ash	37.2	19.4
Comm - Manitoba Maple	36.5	30.2
Comm - Okanese Poplar	18.5	17.6
Comm - Sea Buckthorn	99.8	1.0
Comm - Silver Buffaloberry	32.9	4.3
Comm - Caragana	23.8	7.4

Project Comments:

For many locations, seedlings are missing or dead. For seedlings that are missing by one or two are discovered, this is attributed to herbivory, most likely voles or gophers. With seedlings that are missing but no evidence present, this could be attributed to herbivory, moved from the originally planned location, or the site was not planted and documentation error. For dead seedlings with seedling carcass present, this is attributed to climate such as drought, heat, lack of consistent snow cover, or herbicide.

N

Siksika Community Phase 1 - Part 1 Walk Though Assessment Map 1

Project Partners:

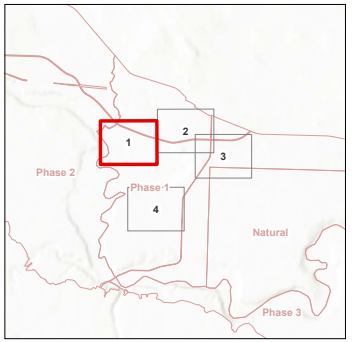
Siksika Nation

Project Forest

Observation Point

Status

- Planted
- Partially Planted
- Not Planted



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Spatial Reference
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Datum: North American 1983
Map Units: Meter
Scale: 1:12,000

TreeTime SERVICES INC.

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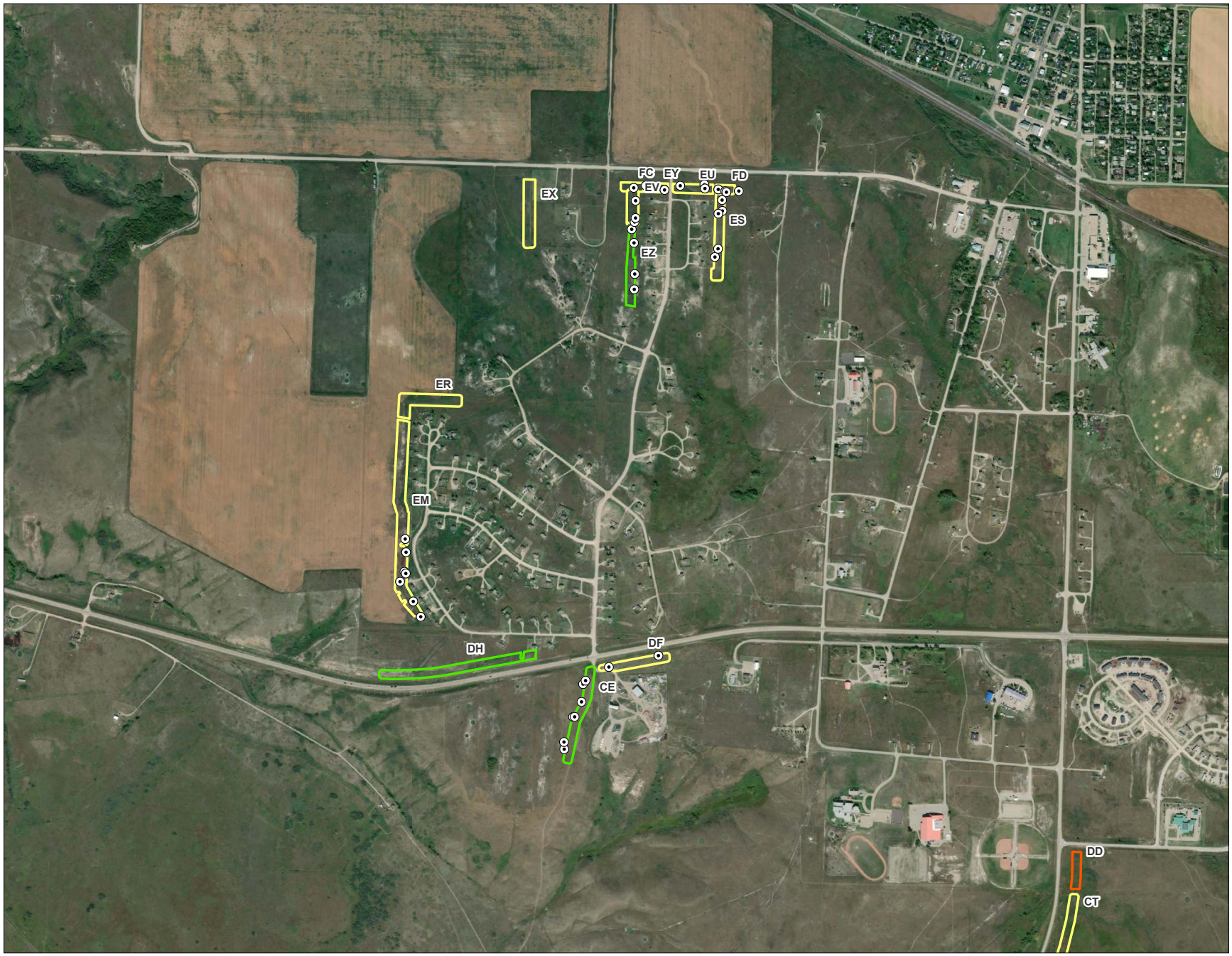


N

Siksika Community Phase 1 - Part 1 Walk Though Assessment Map 2

Project Partners:

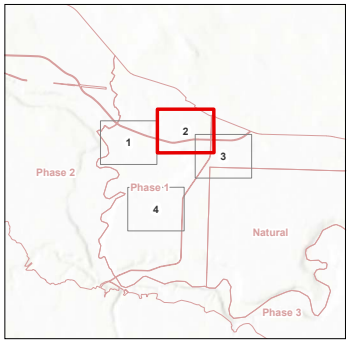
Siksika Nation

Project Forest

Observation Point

Status

- Planted
- Partially Planted
- Not Planted



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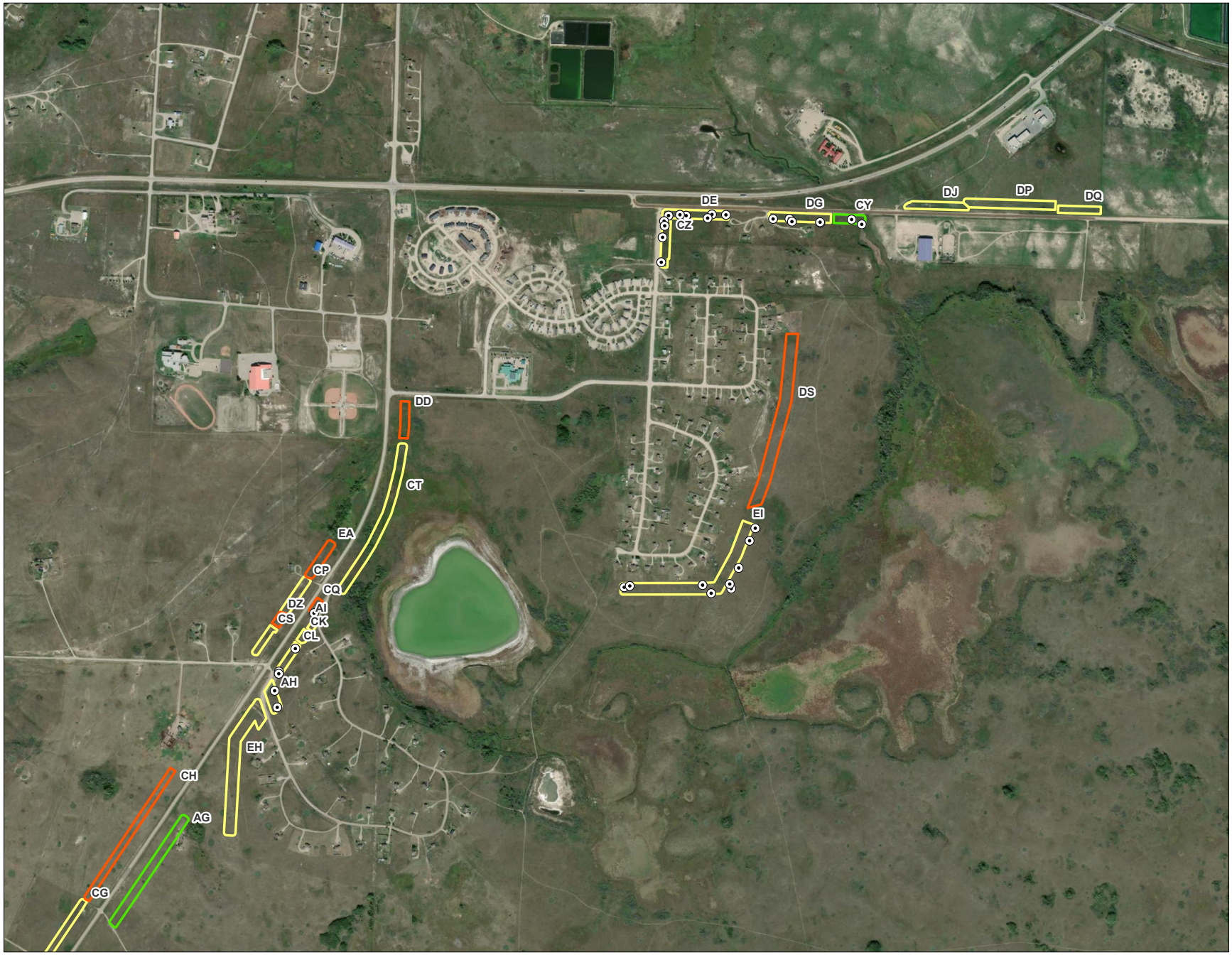


N

Siksika Community Phase 1 - Part 1 Walk Though Assessment Map 3

Project Partners:

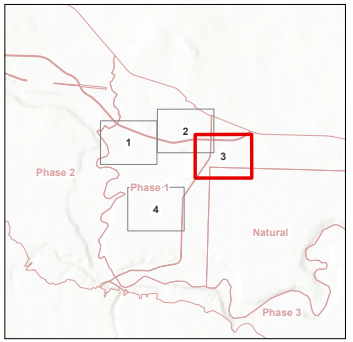
Siksika Nation

Project Forest

Observation Point

Status

- Planted
- Partially Planted
- Not Planted



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Spatial Reference
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Datum: North American 1983
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Scale: 1:12,000

TreeTime SERVICES INC.

0 125 250 500
Meters

N

Siksika Community
Phase 1 - Part 1
Walk Though
Assessment
Map 5

Project Partners:

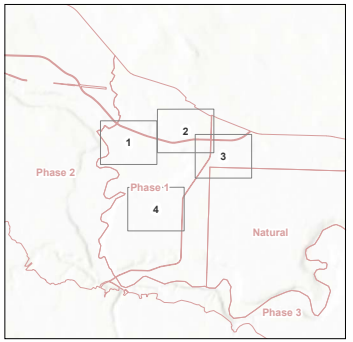
Siksika Nation

Project Forest

- Observation Point

Status

- Planted
- Partially Planted
- Not Planted



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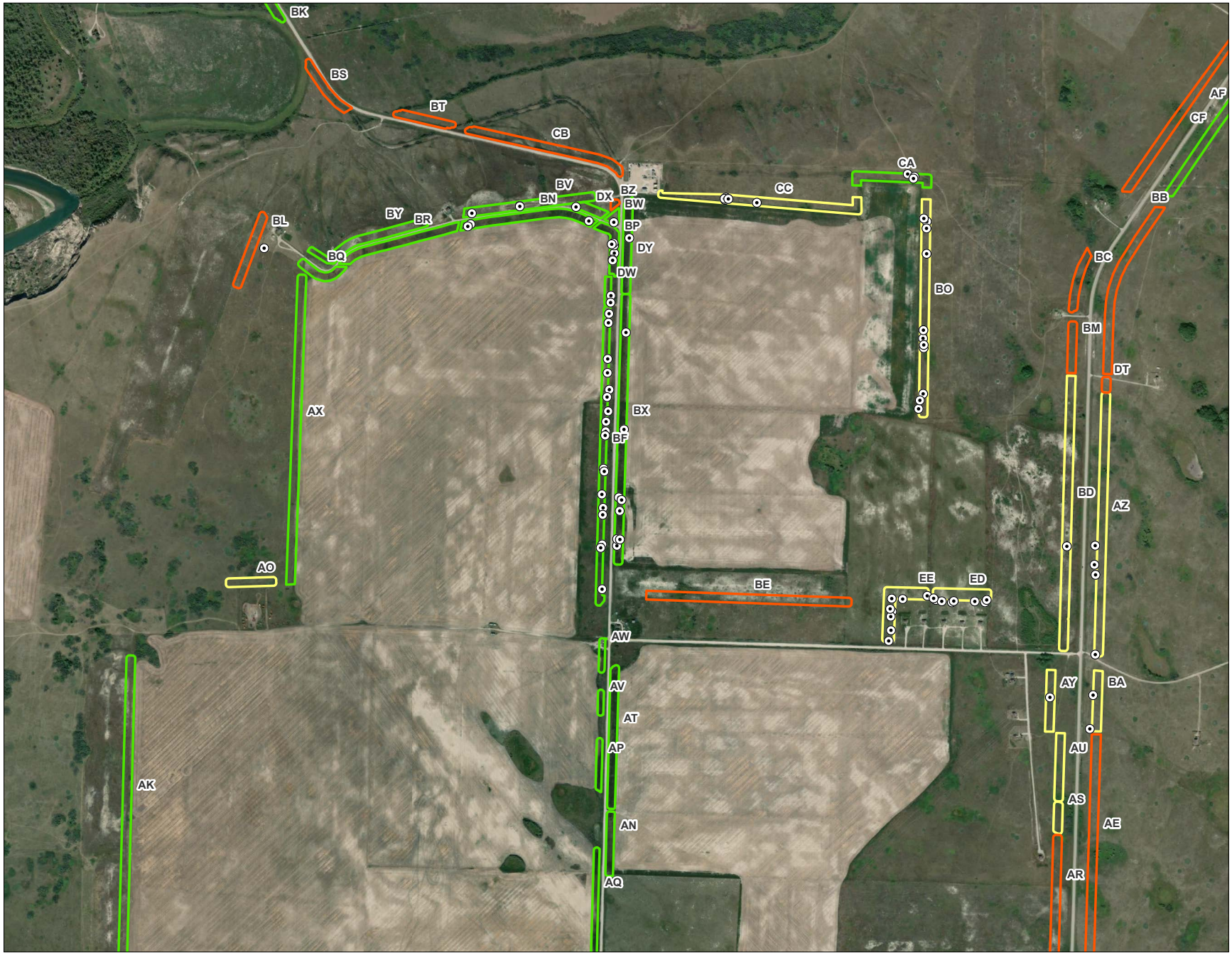
Meters



N

Siksika Community Phase 1 - Part 1 Walk Though Assessment Map 4

Project Partners:

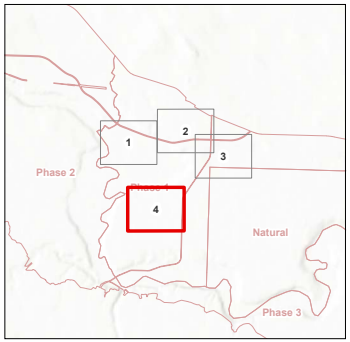
Siksika Nation

Project Forest

- Observation Point

Status

- Planted
- Partially Planted
- Not Planted



Created by: Tree Time Services Inc.
Spatial Reference
Name: NAD 1983 UTM Zone 12N
Datum: North American 1983
Map Units: Meter
Scale: 1:12,000

TreeTime SERVICES INC.

0 125 250 500
Meters

Site Photos

Figure 1. Example of a struggling Scot's Pine, Polygon CC (50.818, -113.092)

Figure 2. Example of a healthy Scot's Pine, Polygon CA (50.820, -113.084)

Figure 3. Example of dead Scot's Pine, Polygon CA (50.820, -113.084)

Figure 4. Example of a health Ponderosa Pine, Polygon DS (50.837, 113.034)

Figure 5. Example of a struggling Ponderosa Pine, Polygon ES (50.862, 113.068)

Figure 6. Example of a dead Ponderosa Pine, Polygon DS (50.834, 113.034)

Figure 7.. Example of a healthy Blue Spruce, Polygon BX (~50.808, -113.098)

Figure 8. Example of a struggling Blue Spruce, Polygon BX (50.815, -113.098)

Figure 9. Example of a healthy Manitoba Maple, Polygon ED (~50.807, -113.080)

Figure 10. Example of a struggling and dead Manitoba Maple, Polygon ED (~50.807, -113.080)

Figure 11. Example of a healthy Green Ash, Polygon ES (~50.860, 113.073)

Figure 12. Example of a Green Ash that received herbicide, Polygon EM, (~ 50.851, 113.084)

Figure 13. Example of a healthy Okanese Poplar, Polygon DI (50.854, 113.125)

Figure 14. Example of a dead Okanese Poplar, Polygon DI (50.854, 113.125)

Figure 15. Example of dead Caragana, Polygon DS (~50.837, 113.039)

Figure 16. Example of struggling caragana, Polygon ES (50.860, 113.069)

Figure 17. Example of a healthy Silver Buffaloberry, Polygon DI (50.853, 113.124)

Figure 18. Example of a healthy Sea Buckthorn, Polygon CE (~ 50.846, 113.076)

Figure 19. Example of missing Sea Buckthorn, Polygon CE (50.846, 113.076)

Appendix D - Carbon Sequestration Calculations

Siksika Carbon Sequestration Calculations

Species	# Number of Trees	# Annual CO_2e per Tree (kg)	# 150-Year CO_2e per Tree (kg)	# Total CO_2e over 150 Years (kg)	# Total CO_2e over 150 Years (tonnes)
Blue Spruce	6840	5.83	875	5985000	5985
Scots Pine	2970	6.67	1000	2970000	2970
Ponderosa Pine	1620	7.33	1100	1782000	1782
Okanese Poplar	11245	8.33	1250	14056250	14056.25
Manitoba Maple	5110	6.67	1000	5110000	5110
Common Caragana	88390	0.5	75	6629250	6629.25
Sea Buckthorn	2780	0.67	100	278000	278
Silver Buffalo Berry	1320	0.83	125	165000	165
Green Ash	3600	6.67	1000	3600000	3600
Smokey Saskatoon	570	0.4	60	34200	34.2
Wild Red Raspberry	130	0.17	25	3250	3.25
Northline Saskatoon	3575	0.4	60	214500	214.5
Showy Mountain Ash	2520	5	750	1890000	1890
Colorado Blue Spruce	7020	5.83	875	6142500	6142.5
					48860