DOMINION LAND SURVEY

COMPOSED AND PRODUCED BY:

Chris Rule

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The Dominion Land Survey System was initiated by the Canadian Government in 1869 for settlement purposes. This system with variations are used in various areas throughout the world and in the United States. In Western Canada the survey extends from the First Meridian (97° 27’ 28.41” W) in Manitoba to the Seventh Meridian (122° 00’ 00” W) in British Columbia.
The Area of the Western Canada Survey
A closer look of the 7 meridians

DOMINION LAND SURVEY
Why was 97° 27’ 28.41” chosen as the beginning of the survey, you ask?

Observations were taken near Pemberton, Manitoba in 1869 to determine the 49th parallel for the Canada-US border. The starting point for the First Meridian was begun 10 miles west of Pemberton to avoid already settled properties. The Second Meridian was established on the 102°W Longitude, just inside the Saskatchewan border, and then every 4 ° W thereafter.
Let’s look at SASK.

3rd Meridian just West of Prince Albert
Now for a closer look into how Townships, Ranges and Sections work.........
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Starting at the US border

Township lines run parallel across Saskatchewan every 6 miles apart.

6 miles between each Township line

US Border - 49th Parallel
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Starting at the 2\textsuperscript{nd} Meridian
Range lines run parallel (up and down) across Saskatchewan to the Alberta Border every 6 miles apart.
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Now you have a grid made up of squares each square 6 miles by 6 miles which looks like this...
Now you have a grid made up of squares each square 6 miles by 6 miles which looks like this...

Townships run this way........
DOMINION LAND SURVEY

Now you have a grid made up of squares each square 6 miles by 6 miles which looks like this...

Ranges run this way....
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Each 6 mile X 6 mile square is of course made of 36 square miles or "SECTIONS"

The sections in a Township are numbered like this...

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Each section is 1 mile by 1 mile square.
Let’s look at a “Section” 1mi. X 1 mi.

Each section is divided into 4 quarters designated

NorthWest
NorthEast
SouthWest
SouthEast
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Let’s look at a “Quarter Section” which is $\frac{1}{2}$ mile X $\frac{1}{2}$ mile in size.

A Section is 640 acres

A Quarter is 160 acres
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Let’s look at another way of dividing up a Section – using “LSD’s” or Legal Sub Divisions

16 LSD’s in a Section

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Section = 640 acres

Each LSD is 40 acres
Legal Sub Divisions can also be divided up into Quarters of an LSD.

Each quarter can be identified as shown.

Each ¼ LSD is 10 acres.
Let’s review... the following location

**SW (1/4) LSD 4, Sec. 31, Twp 63, Rge 27, W 3rd**
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SW (1/4) LSD 4, NW 31, Twp 63, Rge 27, W 3rd

SW (1/4) LSD 4, Sec. 31
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SW (1/4) LSD 4, Sec. 31, Twp 63, Rge 27, W 3rd

This location is 27 ranges X 6 miles wide = 162 miles west of the 3rd Meridian (PA)
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SW (1/4) LSD 4, Sec. 31, Twp. 63, Rge. 27, W. 3rd

Which is about here in Sask.

3rd Meridian just West of Prince Albert

Alber Border

4th Meridian

3rd Meridian

2nd Meridian
Now for some odd things to know about the Dominion Land Survey

Correction lines

Road allowances

Corner mounds

Things to Know
What are Correction Lines?

They are the off-set of Range lines on the sides of a block of 16 townships. In order to get the square grid to work on a round world, 16 Township blocks are shifted East and West to make the correction.
Correction Lines occur every 4 townships going North (24 miles)

Except at US border .........
2 Twps (12 miles)
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CORRECTION LINES

One Township

A Block of 16 Townships

Sometimes the corrections line up, as at each Meridian

Correction Off-Set to the RANGE lines 100 feet more or less
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CORRECTION LINES

There is no adjustment North and South as the lines follow lines of Latitude and are parallel.

One Township

A Block of 16 Townships

Correction Off-Set to the RANGE lines 100 feet more or less
DOMINION LAND SURVEY

CORRECTION LINES

Have you ever driven on a straight road which suddenly jogged over 100 feet or so and then continued on straight?

This may have been a Correction Line!
To allow access to land, road allowances were surveyed every second township line going north...

And every mile going west...
In Saskatchewan Road Allowances are normally 66 feet wide – 1 chain.

There are some exceptions, a block near Prince Albert and South Eastern Saskatchewan where they are 99 feet wide or 1 1/2 chains.
**DOMINION LAND SURVEY**  
**ROAD ALLOWANCES**

The Road Allowance pattern for a Township looks like this....

<table>
<thead>
<tr>
<th>Road Allowances are not</th>
<th>part of the section. This is why Certificate of Title describes a Quarter Section as “comprising 160 acres more or less”</th>
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</table>
A Section line with no Road Allowance is called a “Blind Line”
Corner Mounds mark the intersection of the Section Lines. In each mound was driven a steel “Survey Pin” or “Stake”.
The end of the pin was squared so Roman Numerals could be filed or later stamped on the side.

Survey pins were often “borrowed” by early settlers.
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CORNER MOUNDS

Each pit is on a different Quarter Sec.

The exact location is centre of mound – not the stake.

Survey Stake approx. 2' long

4 pits dug to make "mound" approx.
2 ft sq. X 1 1/2' deep
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CORNER MOUNDS

What happened when the mound was situated in a lake?

A “Witness Mound” is located along one of the Section Lines. Witness mounds are identical to Corner Mounds.
What happens if you have to find a location using Township Range system for areas that have not been surveyed yet?

If using a map, simply extend the survey lines or grid on the map. A plastic overlay is helpful for this.
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THINGS TO KNOW

Surveying land in Saskatchewan has been done over the years since 1875. Different principals were applied over the years to make corrections for various errors. For general applications the Township/Range lines can be considered as accurate.

Even to this day, the city of Prince Albert still has to contend with the old “River Lot System” an early French Canadian System.
A quick review...

Most of Saskatchewan is “West of the 2nd or 3rd Meridian except the South East corner.

Townships (36 Sections) are made by Township lines and Range Lines which are 6 miles apart.

A Section is 1 mi. X 1mi. Or 640 acres.
DOMINION LAND SURVEY REVIEW

A Section is made up of 4 Quarters NW-NE-SW-SE.

A Quarter is $\frac{1}{2}$ mi. $\times$ $\frac{1}{2}$ mile or 160 acres.

A Section is also made up of 16 Legal Subdivision or “LSD’s”

An LSD is 40 acres

A Quarter of an LSD is 10 acres.
DOMINION LAND SURVEY REVIEW

Correction lines occur every 24 miles when traveling North or South

There are no adjustments when traveling East or West

Road Allowances - 66 feet wide - are every 2 miles going North/South and every mile going East/West
Road Allowances are not part of a Section.

Corner Mounds mark the corners where 4 Sections come together.

Witness Mounds indicate where the real mound should be.
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We have covered some of the fundamentals of the Dominion Land Survey System.

Now you can go out and explore and learn more about mapping.
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THE END