Sample Agricultural Site Plan

19548 County Road #55
(Part of Lot 19, Concession 8)

Information to include on an agricultural site plan:

- Municipal address
- Lot and Concession number
- Use of buildings
- Location of all buildings
- Lot dimensions / size
- Set backs from property lines
- Set backs from rivers, ponds and/or other natural features
- North Arrow

- Vehicle access (driveway)
- Retaining walls (if applicable)
- Right of Way & Easements (if applicable)
- Location of septic system & well
- Location of ground source heat pump (Geothermal) (if applicable)
- Drainage plan showing where water will drain from buildings
- Location and discharge of sump pump
1. Selected roof truss spans one truss manufacturer's for frame design and existing to suit building size and roof crest height (see National Building Code of Canada 1995).
2. Optimum wall heights
3. Corresponding knee brace-truss heights

EXAMPLE:
To select snow loads for a hipped-truss pole frame storage building at London, Ontario.

Gable = roof truss span: 10.25m (34')
- roof slope: 10/12
- building width: 42.18m (140')
- building height: 13.57m (45')
- snow and wind sheared by a row of spruce trees that will soon grow higher than the roof
- from the National Building Code of Canada 1995, ground snow S = 1.7 kPa
1-day snow Ss = 0.6 kPa.
1/10 hourly wind q = 0.3 kPa

STEP 1:
Calculate the "Total weighted roof load" from Table 3, Board 4 for the appropriate formula is:

\[ w = 0.05 S + 1.2 S_s + 0.3 \]

\[ w = 0.05 (1.7) + 1.2 (0.6) + 0.3 \]

\[ w = 1.7 + 0.72 + 0.3 \]

\[ w = 2.75 \text{ kPa} \]

STEP 2:
Go to the "Pole Selection Chart", height 45° (90°).
On the horizontal scale for roof span: 10.25m (34'), locate w = 2.75 kPa. With the total weighted roof load, from the 6L, draw a vertical line up into this chart.

STEP 3:
On the vertical scale for 1/10 hourly wind pressure, locate q = 0.3 kPa. From the intersection, draw a horizontal line across you 24 axis until it intersects with the vertical line from Step 2 (see Y axis chart).

STEP 4:
Select the poles. Choose the pole Y is beyond the line for "40x41.4mm (606) Northern NL-1". No pole is not strong enough therefore choose the "40x41.4mm (606) 2.5x-9 NL-1". If you want to use the "40x41.4mm (606) Northern NL-1".

[Diagram and calculations]
1. Optional roof truss spans 9.1m to 21.3m at 3.05m increments (30' to 70' at 10' increments) are from manufacturer for roof design and spacing to suit land area and roof load (see National Building Code of Canada 1986).

2. Length is 2440mm (8') increments

3. Truss clear height 4270 or 4500mm (14' or 15')

4. Siding cladding, see OSB Panel M3J1

5. Optional additional doors up to 4320mm (14') nominal width

6. Wash down fire exit 2 x 7

7. Dimensions encompassed only in the 12200mm (40') span

8. Dimensions encompassed only in the 25360mm (80') span

MATERIALS

Cost-in-place concrete to be mix. 2540 lbs @ 55 days, 3% or restrained.

Reinforcing steel to be 600MPa delivered pump grade, 50mm (2") diameter over reinforcing steel, and 75mm (3") covered between steel and earth.

All wood identified "pressure treated" in CSA pressure treated to "ground contact specification", CS5-203 Wood Preservation.

All site exposed to weather, treated wood or pilings to be hot-dip galvanized.

All spanning members except "pressure treated" wood, in 8x1x6@2.5 x 4@1 spacing grid

Interior sheathing steel to be minimum 0.34mm (35g) base metal thickness (G3a-6x4-66), grade 6, 1205 (G-40), preferred to be on interior for form work/retaining an appropriate.

APPLICATIONS

This plan conforms to the requirements of the National Building Code of Canada 1986. The user of this plan must ensure that the design criteria indicated herein will meet all local design conditions, building regulations and special requirements. The user is responsible to ensure that all required changes are made.

WARNING

DECKS - This structure is designed assuming all decks are sloped and smooth filled in the event of a severe wind.

TRUSS BRIDGING & BRACING - follow all bridging and bracing as specified by truss manufacturer.