Land Forms

Contours (normally 2.5m or 5m, slope tags point downhill) Index contour (every 5th contour) Form line (shows land form features between contours) Knolls (small hills) Small depression, pit Earth bank (earthen cliff)

Earth wall or berm, smaller earth wall

Erosion gully (eroded trench)

Small erosion gully or ditch

Broken ground (lumpy - hard to run)

Special land form feature*

running speed)

distinct tree

Orchard, vineyard

distinct boundary)

between types of trees)

with scattered bushes

Undergrowth (slow running)

Dense undergrowth (hard to run)

Open land, with scattered trees,

Rough open land, with scattered

trees, with scattered bushes

Individual trees, particularly

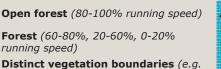
Cultivated land (black line shows

Forest: more runnable in direction of

Water and Marshes



Vegetation **Rock and Boulders**



Impassable cliffs (tags point downhill)

Passable cliffs or rock faces (tags point downhill)

Rocky pit



Boulders, massive boulders



Boulder clusters



Boulder field



Stony ground (density of dots shows severity of stoniness)

Open sand or gravel

Bare rock



Trench (rocky or man-made)

Cave (open end of V shows the direction of cave entrance)

Key to Text

Bold = commonly seen symbols

Special vegetation feature* (often means rootstock)

Purple= forbidden to cross (if you do, you will be disqualified)

*Special feature symbols and their definitions should be listed on the map.

Technical Symbols



Uncrossable boundary (often shown on top of another symbol like a fence)



Crossing point



Crossable passage (shown here through private developed area)



Out-of-bounds area (solid or dashed edges show markings in the terrain)

Man-made Features

Buildings, large, small

Paved areas (black line shows step or

edge of pavement) Road, major road, divided road

Private developed area

Railway, crossable, uncrossable

Power line, major power lines (cross-lines, shapes represent towers)

Fence, ruined fence, high fence

Stone wall, ruined stone wall, high stone wall

Gate or crossing point (shown here in a fence)

Small road (typically gravel), vehicle

Path, small trail

Indistinct trail (hard to spot)

Cut line (break in trees - slow running, no trees, fast running)

Trail junction, indistinct trail junction (gap between trail symbols)

Footbridge, crossing point with bridge, without bridge

Canopy (shown here as a passage between buildings)

> Tunnel (shown here with trail crossing under road)

Ruin, small ruin

Special linear man-made features (pipeline, bobsled track, etc.), crossable, uncrossable*

High tower, small towers (such as hunting platforms)

Cairn or large stone pile

Fodder rack

.....

Special man-made features*

Permanently out-of-bounds

Forbidden route (you can cross it but not travel along it)

First aid post

Refreshment point



For the complete international mapping specification visit www.orienteering.sport

Man-made Features

Paved areas (heavily trafficked, lightly trafficked



Steps or edges of paved area, stair



Private developed area (including gardens - see Vegetation)



Building



Canopy (light grey with outline)



Pillars (shown here under a canopy)



Gravel area, large unpaved trail



Small trail, indistinct trail (hard to spot)



Cut line (break in forest)



Railways (passable, impassable), tramway



Bridge, tunnel/underpass



Multi-level areas (stripe colour represents the surface of the upper level)



Paved area with scattered trees



Passable fence, impassable fence, impassable wall



Passable wall (stone, brick, etc.), retaining wall (half dots point down)

Gate or crossing point (chown here



Gate or crossing point (shown here in a fence)



Small powerline, major powerlines, (cross-lines, shapes represent towers)



High tower, small towers (such as hunting platforms)



Cairn, memorial, small monument, or boundary stone

↑ Fodder rack



Special linear man-made features (pipeline, bobsled track, etc.), passable, impassable*

0 , 0

Special man-made features*

Key to Text

Bold = commonly seen symbols

Purple = forbidden to cross (if you do you, will be disqualified) Note the larger number of forbidden to cross features on sprint maps.

*Special feature symbols and their definitions should be listed on the map.

Water and Marshes



Impassable body of water (pond, lake, deep river, etc.)

Waterhole

Passable body of water (shallow river, wading pool, etc.)

Small creek, intermittent water-

Narrow marsh

Impassable marsh

Passable marsh

Indistinct or seasonal marshes

Well, spring (shown here with stream flowing from it)

Special water feature*

Rock and Boulders

France Er

Impassable cliffs (tags point downhill)

Passable cliffs or rock faces (tags point downhill)

Boulders, massive boulder

99 ▲

Boulder field, boulder cluster

Stony ground

Open sand or gravel

Bare rock

1

Rock pillars or distinctly shaped cliffs

v Rocky pit

Cave (open end of V shows the

direction of cave entrance)

Land Forms



Contours (normally 2m or 2.5m, slope tags point downhill)

Index contour (every 5th contour)

Form line (shows land form features between contours)

Knolls (small hills)

Small depression, pit

Earth bank (earthen cliff)

Earth wall or berm

Erosion gully (eroded trench)

Small erosion gully or ditch

Broken ground (lumpy - hard to run)

Special land form feature*

Vegetation

Open forest (80-100% running speed)
Forest (60-80%, 20-60% running

speed)

Impassible thick vegetation, hedge

Private developed area, garden or flower bed

Distinct vegetation boundary (e.g. between types of trees)

Undergrowth (slow running)

Dense undergrowth (hard to run)

Open land, with scattered trees, with scattered bushes

Rough open land, with scattered trees, with scattered bushes

Individual trees, particularly distinct tree

Orchard, vineyard

Cultivated land (black line shows distinct boundary)

Forest: more runnable in direction of stripes

Special vegetation feature* (often means rootstock)

Technical Symbols

Crossing point



Uncrossable boundary (often shown on top of another symbol like a fence)



Out-of-bounds area (solid or dashed edges show markings in the terrain)



Crossable passage (shown here across out-of-bounds road)



Temporary construction or closed area (such as a restaurant patio)



For the complete international mapping specification visit www.orienteering.sport

Basic Instructions

All you need to know to get started in orienteering!

Most orienteering events are one of two types:

Point-to-point - In standard 'point-to-point' orienteering events the winner is the person to complete the course in the fastest time. To complete the course, all controls **must** be found in the order shown - control circles are connected by lines.

Score - In score events you have a set amount of time to find as many controls (each worth a number of points) as you can and make it back to the finish. You lose points if you are late and gain bonus points if you collect all the controls and are back early. Controls can be visited in any order - control circles are not connected.

The Basics

- You need to check in at each control with the timing system provided by the organizers. At competitive events, if the control doesn't register, use the back up pin-punch to mark your map to prove you visited that control.
- Once you have punched the finish you may not go back on course to visit controls you have missed. (This rule is sometimes relaxed at less competitive events.)
- If you miss any required controls your result will be listed as 'mis-punched' or mp. This is equivalent to not completing the course. Tip: Make sure to check that the control code on the control matches the code on your control descriptions or map so you know you are at the right one.
- The only navigational tools you are allowed to use are a magnetic compass and the official course map. With the exception of GPS sport watches, GPS devices are explicitly disallowed.

Getting Started

- You may rent a timing chip from the organizers or bring your own. Either way, data from previous races must be erased from the chip before you start. A system to do so is always provided.
- In point-to-point events, you may not start at the same time as another competitor on the same course as you (in score events typically everyone starts at the same time). If start times have not been pre-assigned you may start when you wish within the specified time-frame. If start times have been pre-assigned you must start at your assigned time.
- At championship competitions you are not allowed to look at the map or the course before your start time. At most other events you are allowed to study the course and ask for help if needed when you arrive to register.

Safety

- All orienteers must carry a whistle with them while on course. If you are injured or completely lost blow three long blasts on your whistle every few minutes. Someone will come looking for you. **DO NOT blow your whistle as a joke or so you can gain an advantage on course. This could result in disqualification.**
- Your map should provide a safety bearing (direction) which you can use to get back to a major road or other feature which you can then follow back to the start or finish if you are lost. If this isn't mentioned on the map, ask an organizer.
- If you hear three long blasts of a whistle while out on course you are obliged to do what you can to help the injured or lost party even if this means quitting your course and foregoing your result.
- You must **ALWAYS report in to the results crew at the finish line** even if you do not complete your course so that organizers know you have returned safely.
- If there is a course cut-off time, you must make it back to the finish line and report to the results crew by that time, even if it means quitting the course. If you are not back on time, race officials will initiate search and rescue procedures. Organizers have the right to ban repeat offenders from competing.

Fair Play

- Certain features/map symbols are forbidden to cross. Pay particular attention to private property and out-of-bounds areas marked in olive green, or black or purple stripes. If you are caught crossing these symbols you will be disqualified. See o-store.ca's legend sheets for which symbols are forbidden to cross.
- It is frowned upon to follow another competitor without doing your own navigation. Please respect the spirit of the sport and enjoy the challenge of finding your own way.
- In competitive events, it is also frowned upon to ask another competitor where you are unless you are very lost and are willing to give up your race result. This is considered ok for young children or in training scenarios.
- It is considered unsportsmanlike to purposefully engage in behaviour that is distracting to other competitors on course. Please be respectful of competitors that want to focus while racing.
- The environment is a critical part of orienteering. Please carry out everything you bring into the woods unless the organizers have explicitly stated that it is ok to leave something where they will clean it up at the end of the event.

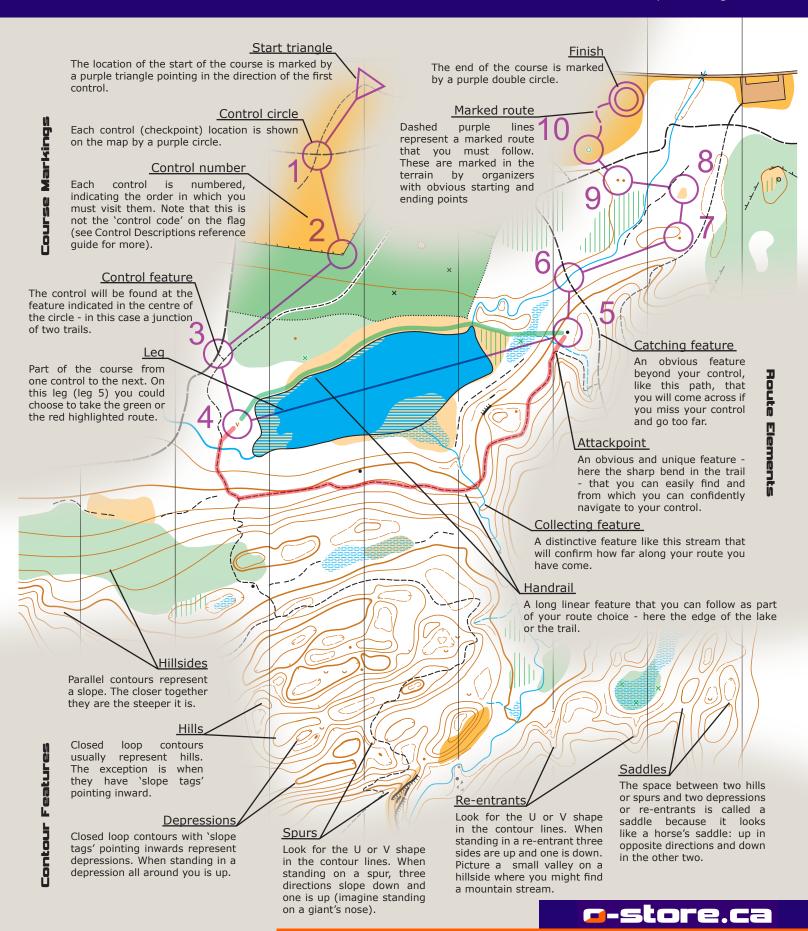
And most importantly - enjoy the experience!



The Orienteering Course

Annotated map and course with key terminology

Standard orienteering maps will always tell you what the scale and contour interval are (not shown in this example). Evenly spaced black or blue lines point to **magnetic** north.

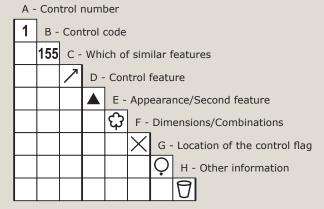


Orienteering Control Descriptions

International Orienteering Federation symbols

Control descriptions are designed to complement the map and give additional information about the location of each control. With practice you should be able to use the control descriptions to visualise the location of the control flag before you get there. This allows you to orienteer much more smoothly throughout the course.

Each column gives unique information:



Control description sheets also give information about the course length and amount of climb (if calculated), special instructions about marked routes or map exchanges, and information about the run from the last control to the finish.

	IOF Control Descriptions									
	Sample Layout			3 k	25 m					
			/			<				
1	145		~			•				
2	152	↓	•			Ò				
	○150 m>									
3	153		Ą	\mathcal{C}		Ċ				
	○200 m>◎									

A - Control Number

The control number matches that The control code is also shown on shown on the map - usually counting the control flag and is used to verify up from 1.

B - Control Code

that you are at the right control. They are most often numbers but can be letters.

C - Which of Similar Features

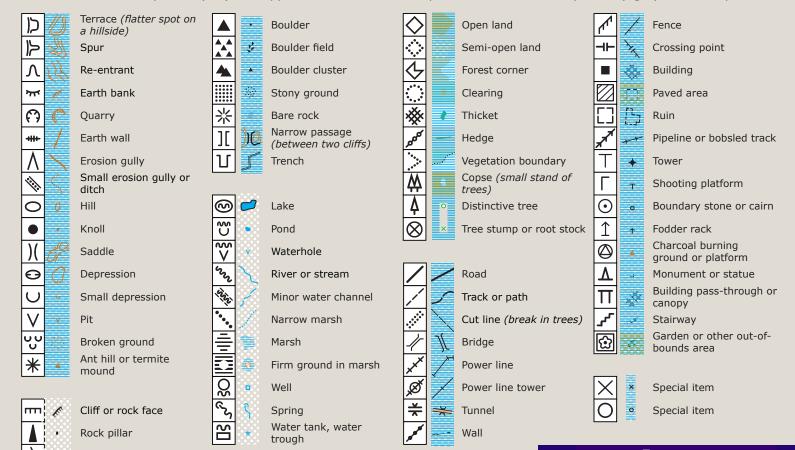
Northern* Upper

Lower 141 Middle

* Arrow may be rotated to mean north-western, western, etc.

Column D - Control Feature

The black and white symbols (left) that appear in the control descriptions match different symbols (right) on the map.



Orienteering Control Descriptions (cont.)

International Orienteering Federation symbols

1.5

E - Appearance

Iow Shallow Deep Overgrown Open Rocky or stony Marshy Sandy Needle leaved

Broad leaved

Ruined

F - Dimensions/

Combinations

Height or Depth (e.g. of 1.2 boulder or pit) 6x5 Size* Height on slope**

Heights of two features

Crossing (4-way junction) Junction (3-way junction)

Bend

All dimensions are in metres.

* Rough length and width of a feature on the ground when it is not obvious from the map - e.g. an oddly shaped knoll or small clearing. A large clearing drawn to shape does not need this.

**Height of the feature as seen from above and below.

G - Location of

the Control Flag



North corner (outside)*

North west tip* North end*

Upper part

Lower part

Top

П Beneath

Foot (e.g. of cliff)

North east foot*

Between

All directions are relative to the control feature in column D.

* May be rotated to any of the 8 cardinal directions to show which side, corner, etc. the flag is at.

Sample Control Descriptions

Example Event Name												
Sample Course			3.	3 k	10 m							
\triangleright			/		<							
1	150		/	//	X							
2	151		~			•						
3	126		/	/	У			-				
4	127		\vee									
5	131					Q		:				
6	132		/	S	X							
7	133		0	•		•		ı				
8	130					0		ı				
9	129	←	•			Ö						
10	128		Α	\$		Ö		1				
O 200 m>												

Course is 3.3 km with 10 m of climb

Start is at bend in trail

Intersection of two trails Inside south-east corner of fence

T-junction of two trails

South-west side of boulder Intersection of path and stream

Between hill and knoll

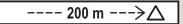
Northern part of clearing

North side of western knoll North side of broad leaved

200 m marked route from last control to finish

Special Instructions

The following special symbol rows show various mandatory instructions. Marked routes and crossing points are also marked on the map and in the terrain with some kind of ribbon or fencing. They must be followed.



Follow 200 m marked route from start line to start flag.

O----225 m --->

()----250 m ---> ∧

H - Other Info

First aid post

Refreshment point

Control site is manned

Follow 225 m marked route away from control

Follow 250 m marked route to map exchange

---175 m ---> ○

○----275 m --->©

Follow 275 m chute from last

chute then follow to finish

between controls

Follow 175 m marked route

Mandatory crossing point (or

control to finish ---175 m ---**>**◎

>0

Navigate to start of 175 m finish

points) between controls >()

150 m

Mandatory passage through out-ofbounds area between controls

Navigate 150 m to finish. No chute or marked route.

