

# Northern Regional & Auckland Orienteering Championships 2020

7<sup>th</sup> – 8<sup>th</sup> November



## Programme

Saturday	7 <sup>th</sup> Nov	Sprint	Wesley College, Pukekohe
Saturday	7 <sup>th</sup> Nov	Middle	Kohekohe, Douglas Road, Awhitu Peninsular
Sunday	8 <sup>th</sup> Nov	Long	Plantation Forest, Mangatarata



## Welcome

Welcome to the bulletin for the Northern Regional / Auckland Orienteering Championships 2020. We are looking forward to great orienteering over the two-day weekend championships.

To all the participants. Enjoy the challenging courses over the weekend, embrace the competition against fellow competitors, but most importantly have fun!!

Orienteering is an amazing sport for the places it can take you and the camaraderie amongst competitors and friends. If you are relatively new to this sport, we hope you will take part in more events in the future after your experiences this weekend.

## Your Hosts

Counties Manukau Orienteering Club (CMOC) have the great pleasure of hosting this event. The event organisers Contact email is [info@cmoc.co.nz](mailto:info@cmoc.co.nz) We may not be able to reply immediately to emails so if you have urgent queries please phone Andrew on 0274724214.

## Information

The event website will contain all the main source of information. This includes Start times, this Bulletin, results, and additional resources for the two-day event. All information can be downloaded from the website as it becomes available. <http://cmoc.co.nz/nroc-2020/>

## Bulletin

It is the responsibility of all participants to have read the information in the final version of this event bulletin. Additional information which becomes available during the event will be placed on the Noticeboard outside the Registration tent, announced at the event, and uploaded to the event website as soon as we are able.

## Our Team

Thank you all to the large contingent of CMOC club members who have volunteered their time to organise and deliver these Northern Regional & Auckland Orienteering Championships. Without their dedication and commitment, this event could not take place.

Andrew Skelton,  
President CMOC

Val Robinson,  
Event Manager NISSC2020

## NRAC 2020 Schedule

Saturday 7th November - Sprint		
9:00	Registration Open	Event: Wesley College, Pukekohe
10:00	Sprint First start	Road access: Puhitahi Road
12:00	Course closure	

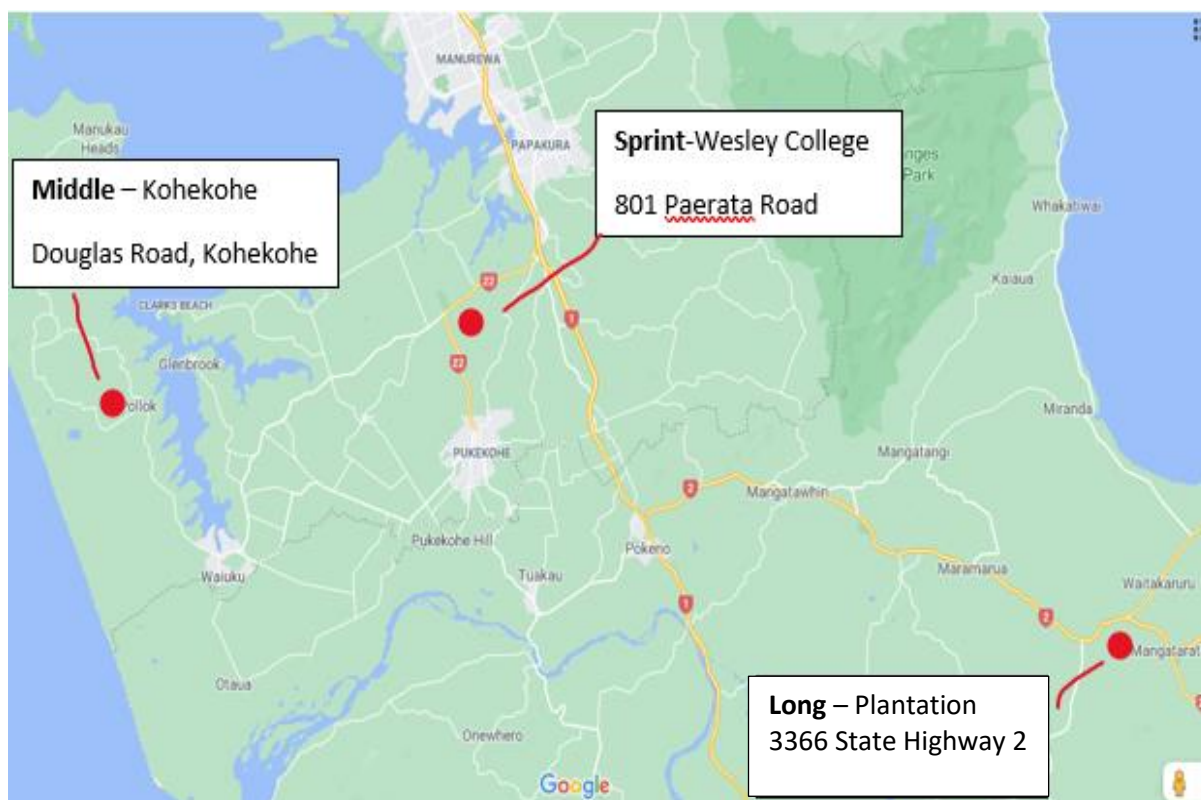
Saturday 7th November – Middle		
13:00	Registration Open	Event: Kohekohe
14:00	Middle First start	Road access: Douglas Road, Awhitu Peninsular
16:00	Course closure	

Sunday 8th November – Long		
9:00	Registration Open	Event: Plantation Forest
10:00	Long First start	Road access: 3366 State Highway 2, Maramarua / Mangatarata
13:00	Course closure	

## General Information

### Event Locations



### *Sprint*

The sprint event will be held at Wesley College, north of Pukekohe. Access to the event is from Puhitahi Road and will be sign posted if travelling from Drury or Pukekohe. No access from Southern School entrance is permitted. For further information, see the Sprint details within the bulletin.

### *Middle Distance*

The Middle-distance will be held at Kohekohe map, Awhitu Peninsular. Access to the event is from Douglas Road and will be sign posted from Waiuku. For further information, see the Middle details within the bulletin.

### *Long Distance*

The long-distance will be held at Plantation forest map. Access to the event is from 3366 State Highway 2, Mangatarata. Please note vehicles travelling from Auckland **must not turn across SH 2** and are required to turn at the roundabout 300m South of the event. The event will be sign posted from Maramarua, for further information, see the Long details within the bulletin.

# Health and Safety

## Covid-19 Protocols Level 1

Because competitors will be travelling from all parts of the Country, we will be asking everyone to:

- Scan the onsite QR tracking code
- observe social distancing of 2m
- sanitise frequently
- While out on course, try to keep a 2-metre distance between yourself and fellow competitors. This includes making space for overtaking others in a respectful way and quickly moving away from the control site once punched (creating space for others) Common courtesy is the best practice here.
- follow all government guidelines, including use of masks where appropriate

### Please do not attend the event if

- You are feeling unwell or are in contact with someone that is unwell.
- You have been advised to stay at home by a health professional.
- You have been in close contact with a suspected or confirmed case of COVID-19 until you have completed the prescribed quarantine period of 14 days, even if you are completely symptom free.
- you are waiting for a COVID-19 test result or if you are self-isolating.

Results will be posted on CMOC club website under Northern Regionals and on winsplits at the conclusion of each days racing.

## Personal Responsibility and Safety

Comprehensive Health and Safety plans are kept at Registration in the Event Centre and can be viewed on the website.

Competitors should use common sense at all times to ensure their own and others safety. Check for specific hazards in the event information and on the Hazards Board at the Event Centre.

**You should carry a whistle on the course for your own safety.** Use your whistle if you need urgent help because of an injury or distress. The recognised distress signal is a series of six short blasts on a whistle. Pause and listen for reply and repeat to allow them to locate you. Do not use your whistle unless it is an emergency.

Competitors are expected to render assistance on their course to anyone who is injured, has blown their whistle, and requires physical assistance. Please render assistance as needed, and make event officials aware of the issue, so as to organise the appropriate response.

To avoid initiating unnecessary searches after the event, all competitors must punch the sportident Finish control even if they do not complete their course.

At all times drive to the conditions and remember that there is never any reason to be, or excuse for, speeding.

Open fires or smoking is prohibited in all competition areas or urban areas. If you see a fire, please notify the event organisers immediately.

## First Aid

The closest Accident and Emergency care facility for the sprint is:

**Urgent Care Franklin Ltd**

149 Manukau Road, Pukekohe, Phone 09 238 6610

**A medical practitioner** will be available on site during the Middle and Long events. However, we would also ask that you bring your own first aid kit and tend to minor injuries such as cuts and grazes yourself.

## Event Cancellation

Cancellation of the event will occur in conditions that are too dangerous for safe competition. Situations that might lead to cancellation are changes to Covid-19 alert levels, fire risk, extreme weather, loss of access, serious earthquake, or death of a competitor or spectator. Should any of the events need to be cancelled, this information will be posted on the event website and Facebook page. An email will also be sent to all participants, using the email address provided as part of their entry, as soon as practical after the decision is taken.

## Rubbish, Waste and Caring for the environment

The organisers aim to be eco-friendly and reduce waste where possible. The Northern Regional / Auckland championship event runs a 'Pack-in, Pack-out' policy, so if you carry it into the venue, please carry it out again, rubbish included.

Please bring your own water bottle to the event each day for use. There will be no paper cups or water stations at the event.

## Water

There will be No Water provided on course or at the finish of the courses, Athletes are encouraged to bring their own water bottles to the event.

## Cell phone coverage

There is coverage at the Sprint and Middle events on Saturday. For the long event at Plantation forest, coverage is intermittent.

## Catering

There will be a coffee cart at the sprint event only. Hot and cold drinks and limited amount of snack food may be purchased. Please observe social distancing and sanitizing protocol.

## Fair Play

We ask all competitors to behave with fairness and honesty. Attempts to gain any information related to the courses, beyond that provided by the organiser, is prohibited before and during the competition. A competitor who breaks any rule, or benefits from the breaking of any rule, may be disqualified.

## Clothing

Competitors should bring a range of clothing and sunscreen to allow for all weather possibilities including a thermal layer if very cold. Full body cover is recommended but not essential for the Middle and Long events.

## Event Centres

Each race will have an Event Centre which will incorporate Registration, Toilets, First Aid, and the Finish. Other than access to the toilets which may be away from the event centre, **the competition area is out of bounds** until your start time.

There will be very limited tent space available for competitors, so clubs are encouraged to bring their own tents.

Lost property can be handed in to Registration at the Event Centre. If you have lost something, you are welcome to see if it has turned up there at any time.

## Maps

Competition maps will be collected at the end of each race and placed into your associated club box (club bubble) The maps can then be collected at the end of each day from the event centre.

## Results & Prizegiving

Results will be posted on CMOC club website under Northern Region Champs and on winsplits at the conclusion of each days racing. <http://cmoc.co.nz/nroc-2020/>

There will be prizegiving at the completion of the middle (including sprint results) and the long event (weather dependent) to acknowledge the podium winners (1<sup>st</sup>, 2<sup>nd</sup> & 3<sup>rd</sup>) of each grade. The timing of prizegiving will be as soon as winners can be determined at the completion of the days event.

## Electronic Timing - Sport Ident and Sport Air System

**Sport Ident** punching system will be used for all three Champs events. **Sport Air** will be available for the sprint event only.

Competitors may use their own or hire from the organisers via the entry process. SI-cards must be cleared and checked before each race. Stations to clear & check SI-cards along with air battery check/air on, will be in the prestart Area.

## Control Descriptions

Control Descriptions will be available in the start lanes as part of the start procedure. Competitors have one minute to choose and prepare their control descriptions. At the Start, there is NO tape or other equipment available to prepare control descriptions.

## Controls

If you punch an incorrect control, ignore it and continue to the correct control; the extra punch will be disregarded by the results software.

If the SI-card or Air stops working or does not function (there is no beep and no flash) then use the control punch to clip your map next to the control description. If you have pin punched any controls on your map you must hand the map in at the finish Desk before leaving the Finish area and explain what you have done.

At the Finish line, punch one of the identical SI finish units or wave over for air. Your elapsed race time only stops when you punch one of these units. Competitors must punch one of these Finish units even if they do not complete their course.

## Start Lists

Start times will be available at <http://cmoc.co.nz/nroc-2020/> from 4th November, and at the Event Arena and at pre-starts.

## Start Procedure

Each runner is responsible for following the correct marked route to their start area. The competition area is out of bounds until your start time.

In the Start area, runners will be required **4 minutes before their start time** and pass through four consecutive starting pens, standing one minute in each. The prestart clock will be set 4 mins before your actual start time however will display the actual start time. This is done for the process below

Prestart	-4	-3	-2	-1	0 mins
Check Name	Late Start Lane				
Start Time	Check SI	Control	Maps	→→Punch	
SI Card	Card	Descriptions		Start box	
	Air check				

Pre-start: Runners clear and check their SI-Card.

In the start pen, Odd course numbers will be on your left and Even on your right.

-4 minutes: SI card, name and the starting time are checked.

-3 minutes: Each runner inserts their SI-card into a Check box. Runners without an SI-card will not be allowed to start

-2 minutes: Loose control description sheets are available for runners to pick up (optional). The control descriptions will also be printed on the map.



-1 minute: Maps. The runner stands beside the map issue box labelled with his/her correct course and class. The start-countdown will be indicated by a series of 6 beeps at -5 to 0 seconds. At the last beep, the competitors can take the map from the map issue box and move forward to the **punching start**.

It is the **competitors' responsibility to pick up the correct map and descriptions** for athletes' course.

Runners must insert the SI card into the start box (on start line) **to officially start run timing**

Runners will then follow the marked route to the start point which is indicated by a control with a flag (but without an SI punching unit) in the terrain and a triangle on the competition map.

### **Late Start**

Runners who arrive to the start late must report to the late start lane where an official will accompany him/her. Control descriptions and the competition map will be handed over by an official, and the competitor then starts the race when told to do so (IOF Rule 22.9) using a punch-to Start. The results of runners who start late will be based on their original start time (**with no time dispensation**). Only if their lateness is the fault of the organiser will their actual race time be used (IOF Rule 22.10).

Any runner who is late, whether through their own fault or otherwise, **should not discuss this with the start officials**. Instead, if the competitor believes the organiser is responsible, he/she should make a complaint after finishing the race at the Problem Desk before leaving the Finish Area.

## Finish Procedure

All runners, including those runners who do not complete the whole course, are required to pass and/or punch one of the SI units on the Finish line. Runners who do not register at the Finish line will be considered as missing in the terrain, which may cause a search for the missing person.

Each runner must download their SI-card at one of the manned download stations. Maps will be collected. After download and returning of hired SI-Card, runners are free to go.

## Complaints and Protests

In accordance with the ONZ and IOF Foot O rules 27 and 28, complaints and protests may be made in email to the controller at [info@cmoc.co.nz](mailto:info@cmoc.co.nz) (in English), using the appropriate forms which are available on the Website. Complaints must also be conveyed at the Registration tent within 60 minutes of finishing. The event Controller will make a decision and notify the complainant as soon as possible.

If the complainant is not satisfied with the Controller's decision, a protest may be lodged at the Registration tent. The time frame for this is within the next 60 minutes (ONZ rule 28.3). Protests will be forwarded to the Controller who will convene a jury. After due consideration, the jury will communicate their decision to the complainant. A \$20 non-refundable fee for the class in question shall accompany any protest. This will be returned if the protest is accepted.

The event Controller will convene a jury of 3 ONZ A-grade Controllers.

## NRAC2020 – Sprint

Date	Saturday, 7 <sup>th</sup> November 2020
Event status	A-level
GPS Coordinates	Event Centre: Wesley College,
Planner	Justine Edwards
Controller	Greta Knarston
Day coordinator	Val Robinson
Map / location	Wesley College
Map Scale	1:4000
Contour interval	5.0 meters
Registration opens:	9:00am
First Start Time:	10:00am
Course Closure:	12:00pm
Prize Giving:	After the Middle at the completion of the days event.

### Course Details

There are areas of the Sprint that are relatively compact and as a result, competitors can expect to see a lot of controls in a small area including many that are not on their course. Competitors are advised to **check their control codes carefully** to avoid punching the wrong control.

Course	Men	Women	Difficulty	Length (km)	Controls	Map Scale
1	M21E, M20 Open Red 1	Open Red 1	Red	3.8km	29	1:4000
2	M16, M18 Open Red 2	W21E, W20 Open Red 2	Red	3.2km	27	1:4000
3	M21A, M40, M50 Open Red 3	W16, W18 Open Red 3	Red	3km	27	1:4000
4	M60 Open Red 4	W21A, W40, W50 Open Red 4	Red	2.8km	27	1:4000
5	M70 Open Red 5	W60 Open Red 5	Red	2.4km	22	1:4000
6	M80 Open Red 6	W70, W80 Open Red 6	Red	2.2km	20	1:4000
7	M14 Open Orange	W14 Open Orange	Orange	1.9km	19	1:4000
8	M12 Open Yellow	W12 Open Yellow	Yellow	1.7km	16	1:4000
9	M10 Open White	W10 Open White	White	1.7km	17	1:4000

## Terrain

Typical campus with a mix of large and small buildings connected by paths, low covered walkways, and open grass areas with sports fields. There are detailed areas that will require close map contact and careful navigation. The campus is compact so runners can expect to see other competitors.

## Directions to the Event Centre

From Auckland Central, take the Southern Motorway to Drury and take the right exit to Pukekohe. Travel West on State Highway 22 for 9.1km towards Pukekohe and turn left into Puhitahi Road at Wesley College. **The Event Centre is on the School Field.**

The distance from Auckland Central is approximately 44kms, which should take 45-50mins, but we suggest you allow extra time for the vagaries of Auckland traffic.

## Parking

There is **parking adjacent to the Event Centre on Puhitahi Road** – follow the directions of the parking wardens. If the parking is full, you will be directed to park on the surrounding streets. Please respect all parking restrictions as well as residential driveways and allow plenty of time to walk back to the event centre.

## Event Centre Details

There are only a small number of toilets at the Event Centre within the school, please follow the signs and **do not go beyond the dedicated access**. Please keep this in mind and be prepared for queues while maintaining social distancing. A open spectator zone has been provided to view the Finish on the sports field. Please respect all Out of Bounds signage.

## Warm-up Area

Competitors may warm up by running up and down along the grass edge on Puhitahi Road.

## Hazards

Being a Saturday, it is expected the campus will be quiet, but there may be some staff or members of the public within the grounds. Be considerate of other people. Competitors should take care running around blind corners, especially when trying to read the map, so as not to collide with a runner coming the other way. If conditions are wet the paths and grass areas may be slippery. Take extra care going up and down steps to avoid a fall.

## NRAC2020 – Middle

Date	Sunday, 8 <sup>th</sup> November 2020
Event status	A-level
Planner	Ross Brighthouse
Controller	Wayne Aspin
Day coordinator	Val Robinson
Map / location	Kohekohe (last used 2012, remapped Wayne Aspin 2020)
Map Scale	1:10,000 & 1:7,500
Contour interval	2.5 meters
Registration opens:	1:00pm
First Start Time:	2:00pm
Course Closure:	4.00 pm
Prize Giving:	As soon as winners can be determined at the completion of the days event.

### Course Details

Course	Men	Women	Grade	Winning Time	No of Controls	Length (km)	Climb (m)
1	M21E Open Red1	Open Red1	Red	40	22	5.2	210
2	M20A Open Red2	W21E Open Red2	Red	40	19	4.5	185
3	M18A, M21A, M40A, Open Red3	W20A Open Red3	Red	35	20	4.1	160
4	M50A Open Red4	W21A, W40A Open Red4	Red	35	16	3.2	105
5	M16A Open Red5	W18A Open Red5	Red	35	14	3.1	105
6	M60A Open Red6	W16A, W50A Open Red6	Red	30	15	3.0	110
7	M70A Open Red7	W60A Open Red7	Red	30	14	2.6	105
8	M80A Open Red8	W70A Open Red8	Red	25	12	2.2	45
9	Open Red9	W80A Open Red9	Red	25	11	2.0	40
10	M14A Open Orange	W14A Open Orange	Orange	25	13	2.5	95
11	M12 Open Yellow	W12 Open Yellow	Yellow	25	12	1.8	40
12	M10 Open White	W10 Open White	White	25	11	1.6	30

## Terrain

The Middle has varied terrain from farmland to pine forest to open high sand dune terrain, with some areas of gorse and lupin. The hilly terrain has some areas of complex contour detail.

## Water

There will be No Water provided on course or at the finish of the courses, Athletes are encouraged to bring their own water bottles to the event.

## Mapping notes

Courses 1-9 (Red) do not have fences marked on map and control descriptions are to IOF standard. Courses 10, 11, and 12 have fences marked on map

## Hazards

**High Dangerous cliffs** are on the South west boundary of the Map. Some farm paddocks may have cattle in them and note that all Electric fences will be turned off.

## Safety Bearing

The safety bearing is **due North-East** back to Douglas Road.

Should a competitor get lost or become disorientated and unable to complete the course, it is advisable to use the safety bearing and travel due North-East until you reach Douglas Road (Event boundary) The competitor should then wait until the search team locates you.

## Directions and Parking

Allow 50 min drive from Wesley College or Pukekohe. From Wesley College or Pukekohe drive to Waiuku and then take the Awhitu Road North-West from Waiuku. The Venue is on Douglas Road approximately 15km north west of Waiuku township. Sign posted from Waiuku. Park as directed in the farm paddock.

## Event Centre Details

Registration, toilets and downloading of results are at the event centre a short walk from the event parking. Due to Covid-19 practices there will be no spectator viewing area or athlete run through.

## Out of Bounds

All areas outside the parking paddock and the event centre  
Warm up area is the parking paddock

## Warm-up

The only warm-up area available is in the parking paddock.

## **NRAC2020 – Long**

Date	Sunday, 8 <sup>th</sup> November 2020
Event status	A-level
Planner	Andrew Peat
Controller	Bruce Peat
Day coordinator	Val Robinson
Map / location	Plantation Forest,
Map Scale	<b>1:10,000 &amp; 1:7500</b> (Map updated 2018 Tommy Hayes)
Contour interval	<b>5 meters</b>
Registration opens:	9.00 am
First Start Time:	<b>10.00 am</b>
Course Closure:	1.00 pm
Prize Giving:	As soon as winners can be determined at the completion of the days event.

### Course Details

Course	Men	Women	Grade	Winning Time	No of Controls	Length (km)	Climb (m)
1	M21E Open Red1	Open Red1	Red	80	26	8.5	405
2	M20A Open Red2	W21E Open Red2	Red	70	15	6.0	305
3	M18 A, M21A, M40A, Open Red3	W20A Open Red3	Red	60	15	5.1	325
4	M50A Open Red4	W21A, W40A Open Red4	Red	55	14	4.7	225
5	M16A Open Red5	W18A Open Red5	Red	50	10	4.0	165
6	M60A Open Red6	W16A, W50A Open Red6	Red	45	11	3.9	120
7	M70A Open Red7	W60A Open Red7	Red	40	11	3.5	165
8	M80A Open Red8	W70A Open Red8	Red	40	9	2.9	100

9	Open Red9	W80A Open Red9	Red	40	8	2.5	70
10	M14A Open Orange	W14A Open Orange	Orange	50 med.	12	3.4	120
11	M12 Open Yellow	W12 Open Yellow	Yellow	35 med.	11	2.2	95
12	M10 Open White	W10 Open White	White	35 med.	11	1.8	85

## Terrain

The long takes place in plantation forest and some open paddocks combining hilly terrain with areas of complex contour spur and gully detail. Variable runnability due to light vegetation undergrowth.

## Hazards

Expected hazards for the forest orienteering map are rough ground, Logs, Pine tree branches, steep slopes, vegetation, and fences.

## Recommended gear

Orienteering shoes and whistles. Full body cover is suggested but not essential. Consider eye protection due to pine tree branches.

## Water

There will be No Water provided on course or at the finish of the courses, Athletes are encouraged to bring their own water bottles to the event.

## Safety Bearing and Event Area Boundaries

The safety bearing is [due North-West](#) back to State Highway 2.

Should a competitor get lost or become disorientated and unable to complete the course, it is advisable to use the safety bearing and travel due North-West until you reach State Highway 2 (Event boundary) The competitor should then wait until the search team locates you.

## Directions and Parking

From Bombay, travel South on State Highway 1 towards Pokeno and then onto State Highway 2 towards Thames. Travel 33.5km to the Thames/Tauranga roundabout (intersection of SH 2 & SH 25) and then turn around via the roundabout back towards Auckland 300m to the event centre on the left. Please note, for safety reasons [vehicles must not turn across SH 2](#) and are required to turn around at the Thames/Tauranga roundabout 300m further South. The event will be sign posted from Maramarua,

The distance from Auckland Central is approximately 84kms, which should take 70-80mins.

## **Event Centre Details**

Registration, Toilets and downloading of results are at the event centre. Due to Covid-19 practices there will be no spectator viewing area or athlete run through.

## **Warm-up area and out of bounds**

The only warm-up area available is from the parking area to the start. All areas outside the parking paddock and the walk to the Start are out of bounds.

## **Start**

The start is approximately 600m from the Event Centre.



# ISOM 2017 Orienteering Map Symbols

## Land forms

	Contour
	Index contour
	Form line
	Slope line
	Contour value
	Earth bank
	Earth wall
	Ruined earth wall
	Erosion gully
	Small erosion gully
	Knoll
	Small knoll
	Small elongated knoll
	Depression
	Small depression
	Pit
	Broken ground
	Very broken ground
	Prominent landform feature

## Water and marsh

	Uncrossable water
	Shallow water
	Waterhole
	Uncrossable river
	Crossable watercourse
	Small crossable watercourse
	Minor/seasonal water channel
	Narrow marsh
	Uncrossable marsh
	Marsh
	Indistinct marsh
	Well, fountain or water tank
	Spring
	Prominent water feature

## Man-made features

	Paved area
	Wide road
	Road
	Vehicle track
	Footpath
	Small footpath
	Less distinct small path
	Narrow ride
	Visible path junction
	Indistinct junction
	Railway
	Power line, cableway or skiff
	Major power line
	Bridge/tunnel
	Footbridge
	Wall
	Ruined wall
	Impassable wall
	Fence
	Ruined fence
	Impassable fence
	Crossing point
	Area that shall not be entered
	Building
	Canopy
	Ruin
	High tower, Small tower
	Cairn, Fodder rack
	Prominent line feature
	Prominent impassable line feature
	Prominent man-made feature

## Rock and boulders

	Impassable cliff
	Cliff
	Rocky pit, Cave
	Boulder, Large boulder
	Gigantic boulder
	Boulder cluster
	Boulder field
	Dense boulder field
	Stony ground: slow
	Stony ground: walk
	Stony ground: fight
	Sandy ground
	Bare rock
	Trench

## Vegetation

	Open land
	Open land with scattered trees/bushes
	Rough open land
	Rough open land with scattered trees/bushes
	Forest: easy running
	Vegetation: slow running
	Undergrowth: slow running
	Vegetation: walk
	Undergrowth: walk
	Vegetation: fight
	Vegetation: impassable
	Forest runnable in one direction
	Cultivated land
	Orchard
	Vineyard
	Distinct cultivation boundary
	Distinct vegetation boundary
	Prominent large tree
	Prominent bush or tree
	Prominent vegetation feature

## Overprinting symbols

	Start
	Control point
	Control number
	Marked route
	Finish
	Out-of-bounds boundary
	Crossing point
	Out-of-bounds area
	Out-of-bounds route
	First aid post, Refreshment point

## Technical symbols

	Magnetic north line
	Registration mark
	Spot height



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Copies of these map symbols and of the IOF (world) control descriptions can be downloaded from [www.maprunner.co.uk](http://www.maprunner.co.uk)

The ISOM 2017 specification can be downloaded from [www.orienteering.org](http://www.orienteering.org)

# IOF Sprint Orienteering Map Symbols

## Land forms

- Contour
- Index contour
- Form line
- Slope line
- Contour value
- Earth bank
- Small earth wall
- Erosion gully or trench
- Small erosion gully
- Small knoll
- Small elongated knoll
- Small depression
- Pit or hole
- Broken ground
- Prominent land form

## Water and marsh

- Waterhole
- Impassable body of water (forbidden to cross)
- Passable body of water
- Passable small watercourse
- Minor watercourse
- Narrow marsh
- Impassable marsh (forbidden to cross)
- Marsh
- Indistinct marsh
- Small fountain or well
- Spring
- Prominent water feature

## Rock and boulders

- Impassable cliff (forbidden to cross)
- Gigantic boulder or rock pillar
- Passable rock face
- Rocky pit
- Cave
- Boulder
- Large boulder
- Boulder field
- Stony ground
- Open sandy ground
- Bare rock

## Technical symbols

- Magnetic north line
- Registration marks
- Spot height

## Man-made features

- Unpaved footpath or track
- Small unpaved footpath or track
- Less distinct small path
- Narrow ride
- Bridge
- Railway
- Tramway
- Power line, cableway or ski lift
- Major power line
- Underpass or tunnel
- Passable stone wall
- Passable wall
- Impassable wall (forbidden to cross)
- Passable fence or railing
- Impassable fence or railing (forbidden to cross)
- Crossing point
- Building (forbidden to cross)
- Canopy
- Pillar
- Area with forbidden access (forbidden to cross)
- Paved area
- Step or edge of paved area
- Passable pipeline
- Impassable pipeline (forbidden to cross)
- High tower
- Small tower
- Calm, memorial, small monument or boundary stone
- Fodder rack
- Prominent man-made feature

\* It is forbidden to cross these items. Competitors violating this rule will be disqualified.



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The full ISSOM 2007 specification is available from [www.orienteering.org](http://www.orienteering.org).

## Vegetation

- Open land
- Open land with scattered trees
- Rough open land
- Rough open land with scattered trees
- Forest: easy running
- Forest: slow running
- Undergrowth: slow running
- Forest: difficult to run
- Undergrowth: difficult to run
- Vegetation: very difficult to run
- Impassable vegetation (forbidden to cross)
- Forest runnable in one direction
- Orchard
- Orchard, one direction (e.g. Vineyard)
- Distinct cultivation boundary
- Cultivated land (seasonally out of bounds)
- Distinct vegetation boundary
- Indistinct vegetation boundary
- Prominent large tree
- Prominent bush or small tree
- Prominent vegetation feature

## Overprinting symbols

- Start
- Control point
- Control number
- Marked route
- Finish
- Uncrossable boundary (forbidden to cross)
- Crossing point
- Crossing section
- Out-of-bounds area (forbidden to cross)
- First aid post
- Refreshment point
- Temporary construction or closed area (forbidden to cross)