



## QOC Course Designer Administrative Guidelines

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Thank you for volunteering to be a Course Designer for QOC. Whether this is your first time or your fiftieth, please review these guidelines – they will help you keep track of the admin aspects of course preparation which will be appreciated by everyone attending your event. Course Setting is one of the most fun and influential volunteer opportunities QOC offers. This general guide hopes to help you optimize the admin side of course setting – enabling you to focus on designing great courses for our events.

### Before Diving In – What this Guide Is / Is Not

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- 1) **This guide is not a Course Setting How-To.** There are myriad resources for designing good courses and this guide won't try to duplicate or even reference them. If you're reading this, it's because you've already completed a Course Setting Clinic or are already a QOC Course Designer.
- 2) **If in doubt – Ask your Vice President.** Every QOC venue is a bit different, and their policies change from year to year – even season to season. If you have any doubts, ask the Vice Presidents, the earlier the better.
- 3) **Local Event Focus.** This guide's scope is limited to QOC local events. National Events will have more requirements and need more lead time and more coordination.

### Meet the Venue(s)

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- 1) **Get familiar with the Venue and Intended Event.** If you're course setting, you've probably already participated in a QOC event at this venue and have a pretty good idea of the features you'd like to use for your courses. The Mapper or Mapping Director will provide the base map(s), any existing map notes, and scales. Those will usually be in OCAD format, suitable for immediate import into Condes course setting software. Besides the fun part of designing navigational challenges between interesting features, here are some other things to watch for and make sure you're tracking as you design the courses:
  - **Type of Event:** If designing any event different from a single map Classic Foot Orienteering, coordinate with the relevant VP, Event Director, and E-Punch Team to make sure you know what's required. This is especially relevant if offering multiple courses or events to a single competitor (like multiple sprints or a more complex event like Mid-Atlantic Championships or Stumble) Some course options:
    - Classic                      • Long                      • Stumble                      • ARDF
    - Sprint                      • Score O                      • MTBO
    - Middle                      • Relay                      • Rogaine
  - Some of these will have other elements such as picnics. Make sure you have good communications with the Event Director and other event leaders to confirm the Club's intent for your event.

- If preparing for a National Event, double and triple check compliance with OUSA map guidelines – especially with respect to scale choices for each type of course, or approved waivers if deviating from them.
- For Event Map Course scales – see OUSA Competition Rules sections 0.15 – 0.20 at <https://orienteeringusa.org/about/rules/>
- For Official Map specifications (all types) see: <https://orienteering.sport/iof/mapping/>
- If any doubts – check with Mapping Director and Event Leaders
- **Check Your Area.** Most of our venues have two or three general options for parking and check in. Coordinate with the Event Director and the VPs to make sure they're getting the permit for your desired location: e.g., Pavilion A instead of Pavilion B on the other side of the park from where you want to be.
- **Out of Bounds and Venue Property Lines.** A lot of our venues may primarily be in a park but have other properties the park surrounds, that cross into the park, or that seem like part of the park ... but aren't. Double check the map file to make sure those boundaries are clear to you.
- **Sensitive Areas.** Some venues have areas the permitting authorities want orienteers to avoid. QOC will always honor that guidance and work with the venue permitting authorities to design courses to avoid them. Not every venue will share their sensitive areas and will instead require a review of QOC control points, course legs, or both. This review can add time to the approval / permitting process and is discussed below. Sensitive Areas may be provided in a separate, older map file, that may not be as current as the primary basemap. You'll have to keep those separate while designing the courses.
  - Best practice for these usually involves a separate Canvas in Condes for the Sensitive Areas that is never printed.
  - **Don't be shy about asking the Mapping Director or VP for boundary clarity. If you have doubts, the participants will be clueless.**
- **Park opening and closing times** so you know how much time you will have when putting out controls
- **Weather Policy.** Some QOC venues have strict weather policies that can force cancelation in the event of rain or ice. Reach out to the VP to confirm venue policy. Brace for cancelation angst as game day approaches. The Website administrator will usually flag the event announcement page if weather is a concern and follow up with a strong Go/No-Go announcement a day or so in advance, or even the morning of the event. If the event is canceled, we'll still need a plan to get early-hung controls out of the woods. Work with the Event Director and VPs to coordinate.
- **Start / Finish / Check In Location Options.** Most of our routine venues use existing pavilions for event headquarters, but sometimes we'll want to try something new, like using a shuttle to get participants started at a more interesting part of the park. Confirm these locations with the Vice Presidents, Event Director, and E-Punch team, especially if using remote starts or a new area.
- **Multiple Starts / Finishes.** If you plan to use different Starts or Finish (multiple Starts are more common), make sure the E-Punch team and Event Director know about them, and their approximate locations.

- This separation was common in the early days of COVID-19 crowd precautions, and still common for separating Advanced / Intermediate / Beginner Starts, with remote Advanced Starts.
  - **Required External Support Teams.** A few QOC venues require dedicated medical team support due to the relative remoteness of the sites or challenging terrain. The VPs will arrange for that support and inform you and the Event Director. The supporting medical teams will also need All Controls positional data to make sure they understand the scope of the event and can position their resources to react quickly if there's an injury. Venues known to require on-site medical support are:
    - Marine Corps Base Quantico
    - Cunningham Falls
- 2) **Multiple Permitting Authorities – One Venue.** One of QOC's successes over the last few years has been coordinating permits with adjacent venue authorities, expanding the available area for courses. A consequence of this is double duty for the relevant Permit Vice President. Once you have the map, review the boundaries and let the VPs know your preference for course area use. As of this writing, the VPs are assuming that our Course Designers will want to use the entire available space and are working permits for both parts. You'll need to confirm we have (or can have) approvals for each part before putting too much time into course design. Some of the mixed authority venues include:
- [Balls Bluff Battlefield Regional Park](#) (NOVA Parks) + City of Leesburg Parks and Recreation + private property owner + LDS Church if we are using the Balls Bluff Regional Park main parking lot
  - [Kings Landing](#) (Calvert County Parks and Recreation) + Huntingtown Natural Resource Management Area (Maryland Department of Natural Resources)
  - [Lake Needwood](#) (Maryland National Capital Park Planning Commission) + Red Gate Park (City of Rockville)
  - [Patapsco - Community College of Baltimore County](#) (CCBC) + Patapsco Valley State Park
  - [Pohick Bay Regional Park](#) (NOVA Parks) + Bureau of Land Management Meadowood if we are doing the event out of Camp Wilson

## **Get Approvals and Tell the World**

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- 1) **All Controls for Approval.** Many venue permitting authorities require an All Controls map before they will issue the permit. This ensures QOC planned courses won't impact their sensitive areas, interfere with park visitors, or intrude into other planned park events. Some parks require drafts of *All Courses* provided in a geospatial information system file format for their review. In general, the earlier you can share your drafts, the easier it will be for the team to work through the reviews, changes, and approval process.
- Timing is always interesting for these. Some venues require control locations at least 90 days before the event, but most will be good if we're able to give them drafts a month ahead of time. Timing requirements can differ between split venue permitting authorities, with one part of the venue wanting more than 90 days and the other part happy with a couple weeks. If in doubt, ask the relevant VP.

- For Prince William Forest Park, the sole venue (so far) that requires review of draft *All Courses*, work with Craig Sheldon (primary) or Greg Lennon (secondary). They will need the georeferenced OCAD file and the event Condes file to convert into the desired format for the permitting authorities and will communicate with them throughout the review, revision, and approval process.
- 2) **Work with other Course Designers.** QOC Foot Orienteering events will sometimes overlap with different types, or Course Designers will set multiple types of courses. The most common is Amateur Radio Direction Finding (ARDF), but others include Night O followed by Day O, sequential Day O events (e.g., Saturday then Sunday), or Mountain Bike Orienteering (MTBO). Duplicative control features from different Course Designers can create some challenges, so early coordination is necessary.
  - 3) **Other Event Factors.** The relevant VP should already have discussed any additional elements of the event with you and the Event Director, but if in doubt, ask, and determine requirements for event structure. Examples include National Ranking Events, Mid-Atlantic Championships, Mass Starts, Stumbles, and Picnics.
  - 4) **Tell the World and Help the Registrar.** Once you have a pretty solid idea of the courses you want to offer at the event, send the course data to the Website administrator and Registrar. Detailed course notes can follow after you've had time to complete the site checks, but the minimum data needed early is:
    - Course Name, Type, Length (kilometers), Climb (meters), and Number of Controls

This will enable website data posting and preregistration form development. This info should be sent no later than a month before the event.

Ideally, all event web pages will be up to date and perfect as soon as the schedule's been posted. **Reality Check:** Try to get the course info required above to the Website administrator and Registrar as soon as you know it (preferably at least a month before the event) and detailed course notes after you've had a chance for site checks.

When in doubt, check the [main QOC web page](#). If your event is showing on the QOC front page Upcoming Events (Next three events), and they're not already there, course notes are probably overdue.

**Show off the venue.** While you are out in the woods, you will see parts of the park in their best light. Share photos with the Website administrator for posting that shows a park or control feature that's likely to attract our participants.

- 5) **Help Participants Make Good Choices.** As you work through the courses and legs, keep good notes and draft Course Designer comments for the web page. When you think you have a decent handle on all the courses, smooth them up and share with the Website administrator. As game day approaches, even the day before, share last minute updates with the Event Director so they can be posted at Check In on site – and if major updates – share with the Website administrator.

- The most effective approach for these is one coordinated event announcement from the Event Director incorporating relevant inputs – of which the Course Designer notes are critical.
  - If the characteristics of your course would influence proper or ideal equipment choices (i.e., leg protection or gaiters, shoes without spikes, etc.) provide that information in the Course Designer notes.
  - If Prominent feature / Special item symbols are used to describe a control location, OUSA and IOF Rules require an explanation of its meaning to be in the pre-race information. This should be clearly identified and included in the Course Designer notes.
  - If there's an **ambiguous feature or potential hazard, add a photo** with comments to the Course Designer notes to help with safety or navigation.
- 6) **Help Participants Stay Safe.** Think about our club members and skills expected for each group when considering control placement. **Especially for Brown:** consider hazards facing our older participants when navigating towards a control placed on a steep, slick, muddy slope in rain or snow.
- As [OUSA Guidelines](#) state: Some orienteers on [**Brown**] may have some vision problems and only limited leg strength. The climb should be closer to 3%, at most 4%. Tough and dangerous areas must be avoided.
  - Although not a standard course, every time a QOC offers a Beige course, there are many takers. Please consider offering a very short advanced course.
- 7) **Help the Event Director Recruit.** In general, communicate with the Event Director early and often.
- **Safety Watches:** If your planned courses cross roads, especially near our more urban parks, discuss the crossing areas with the Event Director to determine if crossing guards are warranted.
    - Even if Safety Watches aren't needed, you'll still need to tell the Event Director where to best place *Runner Crossing* signs if needed.
  - **Control Pickers:** QOC's standard event volunteer roster assumes **the Course Designer and 5 – 6 other volunteers support Control Pickup.** If you won't be available, some additional preparations are needed. If your courses cover a wide area, especially in winter when daylight's a diminishing resource, share your thoughts on optimum and absolute minimum number of Control Pickers with the Event Director.

## Course Setting Kit Coordination

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- 1) **Course Setting Kit Acquisition:** Arrange to pick up the course setting kit for your event. This can be done by attending the event in your region listed before yours or through the VP of your region. Currently MD has one kit, and VA has one kit. It's usually convenient to serve as a Control Pickup Volunteer for the regional event before yours.
  - **Coordinate with E-Punch Team.** The electronic control boxes need synchronized over the course of the season. Before taking the controls away from the event before yours, make sure you know what access the E-Punch team needs.

- **Inventory the Kit.** QOC Electronic Control boxes start at # 101 and run through # 155 for both Maryland and Virginia. Go through the Control Boxes and confirm that you have all of them, and they each have brackets and twine.
  - **Enough Controls.** If you need more than 55 Electronic Control boxes, coordinate that requirement with the E-Punch team a few weeks before your event.
  - **Stands.** Most events have a few controls that benefit from being placed on a stand due to the lack of convenient woods or forest debris to hang them. Estimate the number of stands you'll need as you work through the site checks and coordinate with the VPs or Ted Good for control stands, if you don't have ready access.
    - **Stands:** The Virginia side has a bundle of 10 stands that accompanies the Course Setting Kit. The Maryland side does not. Regardless of the region, control stands are available. Check the Maryland Events VP, and if their supply is insufficient, contact Ted Good, who has additional stands.
  - **If you won't be at the preceding event,** you can usually find someone near the venue or near your residence to carry the Course Setting Kit for you. If you hit a brick wall, talk with the Event Director and see if they can arrange transportation. If that also yields challenges, contact the relevant VP.
- 2) **Course Setting Kit Hand Off:** Your Event Director should be recruiting volunteers for Control Pickup, and it's common for the next regional Course Designer to be one of those Control Pickers. If there are challenges getting the Course Setting Kit to the next Course Designer, contact the Event VP.

## Course File Preparations

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Here are a few thoughts on Course File preparation using Condes Course Setting software.

- 1) **I know what I want the courses to be... now what?** QOC has a Club License for Condes Course Setting Software. If you need the software registration info contact the relevant VP. Condes is Windows-only software. To support Apple users, QOC purchased two Windows laptops (one each for Maryland and Virginia).
- 2) **Lay out your courses in Condes.** A couple common gotchas:
  - Watch the control numbers. Condes defaults to # 31 as the first control, but QOC's electronic control boxes start at # 101. You can change the Condes default from 31 to 101 under `File-->Settings` for this event....
  - Check for legs passing through out of bounds areas.
  - Cut control lines and circles to avoid hiding features.
- 3) **Courses laid out, now what?** When you are satisfied with the courses and control descriptions, please lock the controls, and send the Condes (`.wcd`) and basemap file (usually OCAD `.ocd`) for Event Map preparation.
  - **Event Map Preparation** includes formatting each course for QOC's standard paper sizes, and adding map decorations like the North Arrow, Scale Bar, and Clue Descriptions. The event map prep volunteer will also create clue sheets for each course and provide them to the Event Map Printing Volunteer.

- **Backing up the Course Designers.** Time permitting, the volunteer working Event Map preparation will look for out of bounds surprises, additional control circle cuts, leg cuts, and cross check the control descriptions with the visible map features.
    - Check for standard ISOM 2017-2 course symbols on your map. Discuss with Event Map preparation volunteer if you intend a different size. Some courses force these to deviate from the standard for legibility, but it's better if this is a choice, rather than happenstance or misconfigured defaults.
  - **Keep the Discussion Lively.** The volunteers working Event Map preparation may have questions on your intent for a particular course. Please watch for these and respond as quickly as possible.
  - **Want to Prepare Your Own?** The volunteers working Event Map preparation will be happy to take the week off for your event. Ask the VPs for pointers to QOC Event Map preparation guidelines. [See working tutorial here.](#)
- 4) **Course Files Delivered, now what?** Once the course files have been sent for Event Map preparation, the next couple of things to confirm are:
- Who's going to print the maps and clue sheets?
  - How are the maps getting to the venue?
- As of this writing, these are usually both done by Valerie Meyer, but there have been exceptions.

## Game Day – Spend the Day

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- 1) **Almost There.** In the days preceding the event, most Course Designers will attempt a leisurely approach and hang controls in venue low traffic areas, saving a few along trails and high traffic areas until the morning of the event.
- 2) **Hang the Rest.** On Game Day morning, complete hanging remaining controls.
- 3) **Place Start(s) and Finish(es).** Coordinate with the E-Punch team to place Start and Finish.
  - If using GPS-enabled event software like MapRun, it's best to use a live GPS source and your control map to make sure these are properly located if they've not been precisely streamered.
- 4) **Report to Event Director and E-Punch Team.** The Event Director usually won't allow participants to start checking in until the key volunteers report they are ready. For Course Designers, this means reviewing your Control Plan and S/F placement one last time and then reporting to Event Director that **Courses are Ready**.
- 5) **After the First Start.** Be alert for reports of missing controls and **be ready to coordinate with the E-Punch Team** to get a replacement control relabeled and reprogrammed before surging to the location with the new box.
  - Although not common, controls have been stolen, torn down, thrown away from the control site, or vandalized. It happens – and you'll never accurately predict which one, if any, will be targeted... but don't be surprised when / if this happens.

- 6) **Get Feedback.** As participants return, get feedback from them on how the courses worked / didn't work for them. Although negative feedback can be painful to hear, understanding the struggles of MP/DNF participants can help improve future courses.
  - “Good news doesn't make us better.”
  - **Course discussion session.** If your Game Day schedule permits, plan to conduct a course discussion session for participants around 12-1 pm on one of the more popular courses—usually Orange, Brown or Green. Explain your intent, feature legs, challenges you addressed and take questions from runners.
- 7) **Recover Start(s).** Our usual last start is 1:30 PM, so any time after that, check in with the E-Punch team and see if Start can be recovered. We will sometimes delay that to allow late, Beginner / Intermediate / Volunteer starts, but not much.
- 8) **Prepare the All Controls maps for the Control Pickup Team.** The Map Printing volunteer will usually print 10 All Controls maps for Control Pickup. As the Course Designer, you are most knowledgeable about best way to approach each control location, which groups are best together, and which ones are accessible from a vehicle. Coordinate with the Event Director to determine how many Control Picker volunteers they expect and develop a master All Controls showing the pickup zones.
  - Help the Control Pickers by indicating which controls have stands and any other materials to be pulled from the woods (e.g., control and leg streamers; water and its trash [*if we ever resume putting water in the woods*])
  - If you're briefing the Control Pickup team, please stress the need to Not take away their first control until 3 PM.
- 9) **Brace for missed controls.** More than once, we've had a Control Picker return without a control or call the Event Director confessing they've had a pick up problem... or even an injury that stops them from finishing their part. As Course Designer, you're most qualified to step in when there are Control Pickup challenges, so if you can avoid routine control pickup duty, it's recommended....and if there are no pick up issues, well, you got a break.
- 10) **Inventory Recovered Controls.** We need to make sure that all the control boxes and flags come back. Best practice seems to be laying them out in numerical order, starting with the ones not used in your event. This also enables the E-Punch team to work their magic, whether setting time or synchronizing them.
  - Finish should also be recovered during control pick up.

## Miscellanea

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- 1) **Other Courses and Overlap.**
  - QOC often has **Amateur Radio Direction Finding (ARDF)** // Radio-O courses running in parallel with our regular events. Check with the relevant VP to determine if your event will have an ARDF component. The lead for ARDF events will ask for the Condes and basemap files so those control locations can be deconflicted with yours. ARDF Control Boxes won't normally be in the Course Setting Kits after the first couple of events. Their numbers are # 156 – 165.



- QOC sometimes has **Night Orienteering followed by Day Orienteering** at the same venue. Make sure you're coordinating with your counterpart to avoid hanging two different controls on the same feature. ... or if you are, develop the plan to hang the Day O control and remove the Night O control.
  - A few QOC venues are suitable for **Mountain Bike Orienteering (MTBO)** and it's common for the Foot O Course Designer to also set a MTBO course. If setting both courses, no worries, you'll be able to keep the two types of event separate. If you're not setting both, plan on deconflicting control sites with the MTBO Course Designer.
- 2) **Course Designer Availability Challenges.** Something came up that removes your ability to support the event as originally planned. The impact of this will vary with the circumstances, but in general, contact the relevant VP as soon as possible and let them know the circumstances. Be ready for a discussion of what you can / can't do as well as how far along you were in the Course Designing process.
- In cases where Course Designers have mobility injuries, but remain available for consultation, it's pretty straightforward to muster a control hanging party and keep the event on track. In cases where Course Designers have urgent travel and are unavailable, let the VP know current status and they'll take it from there.
- 3) **Map Updates.** Course Designers who are not proficient in OCAD may need assistance in making map changes—such as adding or subtracting point features – that are useful or critical for their course design. If you find new features, contact the site's lead mapper or the Mapping Director and let them know what you've found, your thoughts on potential impact on the event, and recommended map updates. Photos of the feature will help this discussion.
- While you're in the field – especially for new trails – it's very helpful to record the GPS track for the new / revised trail and use that data to update the basemap.
  - Even if you have mapping software, it's important to only update the basemap for your event in close coordination with the venue lead mapper and the Mapping Director.

**Upon Assignment as Course Designer: Contact the relevant VP for Events with any questions**

- Contact venue lead mapper and Mapping Director for latest copy of basemap.
- Confirm current version of Condes.
- Confirm venue boundaries / out of bounds areas.
- Confirm venue weather contingencies for Event Permission with relevant VP.
- If multiple permit authorities, discuss due dates for All Controls for each with relevant VP.
- Coordinate with Event Director and E-Punch team to confirm preferred venue area (pavilions / parking) for Check In / Start / Finish with relevant VP.
- Confirm park hours and access outside those hours

**Event Date minus 90 Days**

- All Controls due for longest lead Event Permit submissions.
- Start coordination with overlapping Course Designers (ARDF, MTBO, Night O, next-Day O)

**Event Date minus 30 Days**

- All Controls Map to VPs for Event Permit completion (if applicable).
- Confirm intended number of controls.
- Pick up controls and flags, if feasible.
- Course data to Registrar and Website administrator.
- Control Picker estimates and any road crossing signage and road guard volunteer estimates to Event Director.
- Start(s) / Finish(es) / Registration locations confirmed with Event Director and E-Punch Team.
- Confirm plan for Control Kit transfer before and after your event.
- Arrange for control stands.

**Event Date minus 14 to 7 Days**

- Intended final course stats and notes to Event Director and Website administrator (copy to relevant VP) No Later Than the Thursday prior to pre-registration opening (i.e., 9-10 days prior to event)
  - Ensure Course Discussion Session plans (if any) are included and coordinated with Event Director and Publicity Director

**Event Date minus 7 Days**

- Send event basemap and Condes files to Event Map preparation volunteer.

### **Event Date minus 7 to 1 Days**

- Confirm Event Map Printing and Delivery Plan.
- Hang remote / low traffic controls.
- Send final course notes to Event Director.

### **Game Day**

- 8:30 AM – On site – finish hanging remaining controls.
- 9:00 AM – Place Start(s) and Finish(es). Ensure *Runners Crossing* signs posted if needed.
- 9:30 AM – Report **Courses Ready** to Event Director and E-Punch Team.
- 9:45 AM – Give an unused Control Box and Bag to Event Director for Beginner Instruction team use.
- 10:00 AM – With E-Punch Team concurrence, Event Director will announce **Courses Open**. First participants start.
- 1:30 PM – Last Start – Recover Start(s).
- 2:15 PM – Complete All Controls master map with control pick-up assignments for Control Picker team.
- 3:00 PM – Control Pickup Begins. Recover Finish(es).
- 4:00 PM – Control Pickup Concludes. Inventory controls as each Control Picker returns.
- 4:15 PM – Report all controls recovered to E-Punch Team so they can re-time and synchronize the controls before final pack up and hand off to next Course Designer.
- **All Day** – Keep track of pop-up unplanned volunteers to help the Event Director with post event acknowledgements.

### **Post Event**

- Review what went right / wrong.
- Send any expenses to treasurer (copies of receipts needed)
- Document map updates with venue lead mapper and Mapping Director
- Attend the post-event Social if one's been arranged by the Outreach / Publicity Director.

## Key Volunteers (as of September 2023)

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### **Vice Presidents**

Virginia Events – [Charles Carrick](#)

Virginia Permits – [Matt Smith](#)

Maryland Events – [Craig Shelden](#)

Maryland Permits – [Mike Newman](#)

### **Key Volunteers**

Website administrator – [Greg Lennon](#)

Registrar – [Greg Lennon](#)

Event Map Preparation – [Craig Shelden](#)

Mapping Director – [Ted Good](#)

Outreach / Publicity Director – [Sharmagh Yepremian](#)

All Courses Formatting for Permit – [Craig Shelden](#)

All Courses Formatting for Permit – [Greg Lennon](#)

E-Punch – [Amy Louden](#)

E-Punch – [Valerie Meyer](#)

Event Map Printing – [Valerie Meyer](#)

ARDF Coordinator – [Michael Kholodov](#)

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Thank you for your commitment to orienteering. We hope this guide helped smooth your way to focus on the fun parts of course setting. Thanks again for taking on these duties for our club. Feedback and recommendations for improvement are always welcome.

Thanks!  
QOC Vice Presidents

Charles Carrick  
Matt Smith

Craig Shelden  
Mike Newman