



# YELLOWKNIFE Aquatic Centre

Concept Design Report  
November 2020

## **Appendix G: Facility Rules & Guidelines of Swimming Canada**

# **FACILITY RULES & GUIDELINES OF SWIMMING CANADA**



The Facility Rules & Guidelines were prepared by Swimming Canada in partnership with the Provincial Sections, the Canadian Swimming Coaches and Teachers Association and Officials Competition and Rules Committee. They have been prepared in both English and French. Where there is a discrepancy between the two versions, the English version shall be applied. The Facility Rules & Guidelines shall be in force and shall influence all decisions surrounding facility usage for competition and training in Canada until such time as revisions are approved and published. The Facility Rules & Guidelines are to be used in conjunction with the Swimming Canada Rules for ALL sanctioned competitions in Canada. The Facility Rules & Guidelines (Section 3), are also to be used for all affiliated Swimming Canada clubs in their daily training environment.

Published by  
Swimming Canada  
307 Gilmour Street  
Ottawa, Ontario  
K2P 0P7  
Effective: September 1, 2018

## **Contents**

Introduction.....	3
Section 1: FINA Facility Rules .....	5
Section 2: Canadian Facility Rules & Guidelines - Competition.....	11
Rules .....	11
Guidelines: .....	13
Section 3: Canadian Facility Rules – Training .....	14
Appendix A: Facility Standard Comparison for Sanctioned Competitions .....	15
Appendix B: Swimming Canada Request for Bids (2017 – 2020).....	16
Appendix C: New Pool Construction Guidelines.....	17

## Introduction

### Purpose:

The Facility Rules & Guidelines of Swimming Canada provide a single source of facility information regarding all facility rules and guidelines required for sanctioned competitions and training use for affiliated clubs. The Facility Rules & Guidelines will be a living document that will be updated as required. The Facility Rules & Guidelines of Swimming Canada supplement the current Swimming Canada Rules, (<https://www.swimming.ca/en/swimmingcanadarules/>) that are specific to the swimming rules for ALL sanctioned competitions held in Canada.

### Overview:

**Section 1: FINA Facility Rules** – primarily used for FINA Competitions including World Championships and Olympic Games

**Section 2: Canadian Facility Rules & Guidelines for Sanctioned Competitions in Canada**

**Section 3: Canadian Facility Rules for Training in Canada**

Appendix A and B, provide standards for existing pools when considering international, national and provincial facility requirements. Appendix C will provide minimum standards required when considering a new pool construction project and is currently under development.

**Appendix A: Facility Standard Comparison for Sanctioned Competitions**

**Appendix B: Swimming Canada Request for Bids (2017 – 2020)**

**Appendix C: New Pool Construction Guidelines (To be completed)**

### Interpretation:

“Affiliation” means fully registered;

“Backstroke Turn Indicator” means flagged ropes suspended across the pool from fixed standards placed 5.0 metres from each end wall;

“CFR or Canadian Facility Rule” means a Canadian specific facility rule related to either competition or training;

“Competition” or “Meet” or “Time Trial” or “Event” means a sanctioned swimming competition;

“CSCTA” means the Canadian Swimming Coaches and Teachers Association;

“FINA” means the “Fédération Internationale de Natation”;

“OCRC” means the Officials Competition and Rules Committee of Swimming Canada;

“Provincial Championship Competition” means competitions which are designed and run in accordance with the meet format determined from time to time by the Provincial Section (PS);

“Provincial Section (PS)” means that geographically defined provincial or territorial swimming organization, which is a Member of Swimming Canada;

“Reasonable Variance” is to be determined having regard to the health and safety of all users, including but not limited to the age and ability of the swimmer(s), the type of training and/or competitions to take place at the venue, and respecting all rules, policies, standards, or legislation applicable to the facility;

**“Rule”** means a set standard which must be met;

**“Sanctioned Competition”** means a swimming competition approved under the authority of Swimming Canada in a facility having the minimum standards determined by Swimming Canada with the expectation of qualified officials who conduct the competition under the published rules; and where the results of the competition are entered in the Swimming Canada results database. Swimming Canada designates the authority of sanctioning competitive events to Provincial Sections for events taking place in their respective Provinces (Link: [Swimming Canada Event Sanctioning Policy](#));

**“Starting Platform”** is also known as a starting block and is used when diving during sanctioned competitions or during training. The height of the platform above the water surface shall be measured from the level of the water surface to the top (front) of the starting platform;

**“Swimming Canada National Competition”** means competitions which are designed and run in accordance with the meet format determined from time to time by Swimming Canada; these events include, but may not be limited to:

- Olympic, World, Commonwealth, Pan Pacific, Pan American TRIALS;
- Paralympic, Para Pan Pacific, Para Pan American TRIALS;
- Canadian Swimming Championships;
- Speedo Eastern Championships and Speedo Western Championships;
- Canadian Junior Swimming Championships;
- Can Am Para-swimming Championships;

**“Water Depth”** means the water depth as measured from the bottom of pool to the water level at the end wall or any given point in the course of the pool per the rules defined.

## Section 1: FINA Facility Rules

### FINA FACILITIES RULES

#### *Preamble:*

*The Facilities Rules are intended to provide the best possible environment for competitive use and training. These Rules are not intended to govern issues related to the general public. It is the responsibility of the owner or controller of a facility to provide supervision for activities undertaken by the general public.*

- FR 1.1 **FINA Olympic Standard Pools.** All World Championships (except the Masters World Championships) and Olympic Games must be held in a pool which complies with Rules FR 3, FR 6, FR 8, and FR 11.
- FR 1.2 **FINA General Standard Pools.** Other FINA events should be held in FINA Olympic Standard Pools, but the Bureau may waive certain standards for existing pools if they do not materially interfere with the competitions.
- FR 1.3 **FINA Minimum Standard Pools.** All other events held under FINA rules should be conducted in pools that comply with all of the minimum standards contained within these Facilities Rules.
- FR 1.4 In order to protect the health and safety of persons using swimming facilities for the purposes of recreation, training and competition, owners of public pools or pools restricted only to training and competition must comply with the requirements established by law and the health authorities in the country where the pool is situated.
- FR 1.5 New competition equipment (e.g. starting blocks, lane-ropes, etc.) must be available by 1<sup>st</sup> January in the year of the Olympic Games and FINA World Championships.

#### **FR 2 SWIMMING POOLS**

##### FR 2.1 Length

FR 2.1.1 **50.000 metres.** When touch panels of Automatic Officiating Equipment are used on the starting end, or additionally on the turning end, the pool must be of such length that ensures the required distance of 50.000 metres between the two panels.

FR 2.1.2 **25.000 metres.** When touch panels of Automatic Officiating Equipment are used on the starting end, or additionally on the turning end, the pool must be of such length that ensures the required distance of 25.000 metres between the two panels.

##### FR 2.2 Dimensional Tolerances

FR 2.2.1 The admissible tolerance in 50.00m swimming pools will be +0.010. -0.000. Tolerances will be measured as follows:

**Wall to Wall:** Minimum 50.020/Maximum 50.030. Tolerances have to be consistent 0.300 mm above to 0.800 metre below the water surface.

These measurements should be certified by a surveyor or other qualified official, appointed or approved by the Member in the country in which the pool is situated. (see Swimming Diagram 1.50m Fig 1 in FINA Handbook)

FR 2.2.2 The admissible tolerance in 25.00m swimming pools will be +0.010, -0.000. Tolerances will be measured as follows:

**Wall to Wall:** Minimum 25.020/Maximum 25.030. Tolerances have to be consistent 0.300 mm

above to 0.800 metre below the water surface.

These measurements should be certified by a surveyor or other qualified official, appointed or approved by the Member in the country in which the pool is situated.

**FR 2.3 Depth** - A minimum depth of 1.35 metres, extending from 1.0 metre to at least 6.0 metres from the end wall, is required for pools with starting blocks. A minimum depth of 1.0 metre is required elsewhere.

**FR 2.4 Walls**

**FR 2.4.1** End walls shall be vertical, parallel and form 90 degree right angles to the swimming course and to the surface of the water. They shall be constructed of solid material, with a non-slip surface extending 0.8 metre below the water surface, so as to enable the competitor to touch and push off in turning without hazard.

**FR 2.4.2** Rest ledges along the pool walls are permitted; they must be not less than 1.2 metres below the water surface, and may be 0.1 metre to 0.15 metre wide. Both internal and external ledges are acceptable, however internal ledges are preferred.

**FR 2.4.3** Gutters may be placed on all four walls of the pool. If end wall gutters are installed, they must allow for attachment of touch panels to the required 0.3 metre above the water surface. They must be covered with a suitable grill or screen.

**FR 2.5 Lanes** shall be at least 2.5 metres wide, with two spaces of at least 0.2 metre outside of the first and last lanes.

**FR 2.6 Lane Ropes**

**FR 2.6.1** In an 8-lane pool, lane ropes shall extend the full length of the course, secured at each end wall to anchor brackets recessed into the end walls. The anchor shall be positioned so that the floats at each end wall of the pool shall be on the surface of the water. Each lane rope will consist of floats placed end-to-end having a minimum diameter of 0.10 metre to a maximum of 0.15 metre.

In a swimming pool the colour of the lane ropes should be as follows:

- Two (2) GREEN ropes for lanes 1 and 8
- Four (4) BLUE ropes for lanes 2, 3, 6, and 7
- Three (3) YELLOW ropes for lanes 4 and 5

The floats extending for a distance of 5.0 metres from each end of the pool shall be of RED colour. There shall not be more than one lane rope between each lane. The lane ropes shall be firmly stretched.

		GREEN	
1			
2		BLUE	
3		BLUE	
4		YELLOW	
5		YELLOW	
6		YELLOW	
7		BLUE	
8		BLUE	
		GREEN	

- FR 2.6.2 At the 15-metre mark from each end wall of the pool the floats shall be distinct in colour from the surrounding floats.
- FR 2.6.3 In 50 metre pools the floats shall be distinct to mark 25 metres.
- FR 2.6.4 Lane numbers of soft material may be placed on the lane ropes at the start and turning end of the pool.
- FR 2.6.5 Lane marking measurements – see FINA Handbook.
- FR 2.7 **Starting Platforms** shall be firm and give no springing effect. The height of the platform above the water surface shall be from 0.5 metre to 0.75 metre. The surface area shall be at least 0.5 metre x 0.5 metre and covered with non slip material. Maximum slope shall not be more than 10 degrees. The starting platform may have an adjustable setting back plate. An adjustable back stroke starting platform may also be used. The platform shall be constructed so as to permit the gripping of the platform by the swimmer in the forward start at the front and the sides; it is recommended that, if the thickness of the starting platform exceeds 0.04 metre, grips of at least 0.1 metre width on each side and 0.4 metre width in the front be cut out to 0.03 metre from the surface of the platform. Handgrips for the forward start may be installed on the sides of the starting platforms. Handgrips for backstroke starts shall be placed within 0.3 metre to 0.6 metre above the water surface both horizontally and vertically. They shall be parallel to the surface of the end wall, and must not protrude beyond the end wall. The water depth from a distance of 1.0 metre to 6.0 metres from the end wall must be at least 1.35 metres where starting platforms are installed. Electronic read-out boards may be installed under the blocks. Flashing is not allowed. Figures must not move during a Backstroke start.
- FR 2.8 **Numbering** - Each starting block must be distinctly numbered on all four sides, clearly visible. It is recommended that lane number 0 shall be on the right-hand side when facing the course from the starting end with exception of 50m events, which may start from the opposite end. Touch panels may be numbered on the top part.
- FR 2.9 **Backstroke Turn Indicators** - Flagged ropes shall be suspended across the pool, 1.8 metres above the water surface, from fixed standards placed 5.0 metres from each end wall. Distinctive marks must be placed on both sides of the pool, and where possible on each lane rope, 15.0 metres from each end wall.
- FR 2.10 **Backstroke Ledge** – A backstroke ledge may be used:
- The ledge may be adjustable to 4 cm above or 4 cm below the water level.
  - The ledge is a minimum of 65 cm in length.
  - The ledge must be 8 cm in height, 2 cm at the width with 10 degrees of slope.
- FR 2.11 **False Start Rope** may be suspended across the pool not less than 1.2 metres above the water level from fixed standards placed 15.0 metres in front of the starting end. It shall be attached to the standards by a quick release mechanism. The rope must effectively cover all lanes when activated.
- FR 2.12 **Water Temperature and movement.** Water temperature shall be 25° to 28°. During competition the water in the pool must be at a constant level, with no appreciable movement. In order to keep the water level, preserve the transparency of water and take into consideration the health regulations in force in most countries, inflow and outflow has to be regulated as follows:
- 220 to 250 m<sup>3</sup>/h for 50.00 m pools

- 150 to 180 m<sup>3</sup>/h for 33.33 m pools
- 120 to 150 m<sup>3</sup>/h for 25.00 m pools

At these turnover rates, the water distribution has to be such that no appreciable current or turbulence is created. "Appreciable current" is defined as water movement that can move a floating basketball (filled with 6 liters of water to obtain the right buoyancy) in one direction for more than 1,25m in 60 seconds. The practical way to test this is to install two floating lines crosswise in a swim lane (to obtain a square with 2,5m size, ref. Image 1) and then to leave the basketball in the central point of the square. If the ball does not touch any of the four lane ropes within 60 seconds, the turbulence test is successful. Test should be repeated in lanes 1,3,6,8 on two sides, at 5m from each headwall.

**FR 2.13 Lighting** - Light intensity over starting platforms and turning ends shall not be less than 600 lux.

**FR 2.14 Lane Markings** - shall be of a dark contrasting colour, placed on the floor of the pool in the center of each lane.

Width: minimum 0.2 metre, maximum 0.3 metre.

Length: 46.0 metres for 50-metre-long pools;  
21.0 metres for 25-metre-long pools.

Each lane line shall end 2.0 metres from the end wall of the pool with a distinctive cross line 1.0-metre-long and of the same width as the lane line. Target lines shall be placed on the end walls or on the touch panels, in the centre of each lane, of the same width as the lane lines.

They shall extend without interruption from the deck edge (curb), to the floor of the pool to a maximum of 3 metres. A cross line 0.5-metre-long shall be placed 0.3 metre below the water surface, measured to the center point of the cross line. For 50m pools constructed after 1 January 2006, cross lines 0.5-metre-long shall be placed at the 15 metre mark from each end of the pool. After October 2013 this shall be measured from the end wall to the centre point of the cross line.

**FR 2.15 Bulkheads** - when a bulkhead serves as an end wall, it must extend the full width of the course and present a solid smooth, non-slippery stable vertical surface on which touch pads may be mounted extending not less than 0.8m below and 0.3m above the surface of the water, and must be free of hazardous openings above or below the waterline which may be penetrated by a swimmer's hands, feet, toes or fingers. A bulkhead must be of a design that provides for the free movement of officials along its length without such movement creating any appreciable current or water turbulence.

**FR 3 SWIMMING POOLS FOR OLYMPIC GAMES AND WORLD CHAMPIONSHIPS** (refer to FINA Handbook)

**FR 4 AUTOMATIC OFFICIATING EQUIPMENT**

**FR 4.1** Automatic and Semi-Automatic Officiating Equipment records the elapsed time of each swimmer and determines the relative place in a race. Judging and timing shall be to 2 decimal places (1/100 of a second). Equipment that is installed shall not interfere with the swimmers' starts, turns, or the function of the overflow system.

**FR 4.2** The Equipment must:

**FR 4.2.1** Be activated by the Starter.

**FR 4.2.2** Have no exposed wires on the pool deck, if possible.

FR 4.2.3 Be able to display all recorded information for each lane by place and by lane.

FR 4.2.4 Provide easy digital reading of a swimmer's time.

#### FR 4.3 Starting devices

FR 4.3.1 The Starter shall have a microphone for oral commands.

FR 4.3.2 If a pistol is used, it shall be used with a transducer.

FR 4.3.3 Both the microphone and the transducer shall be connected to loudspeakers at each starting block where both the Starter's commands and the starting signal can be heard equally and simultaneously by each swimmer.

#### FR 4.4 Touch panels for Automatic Equipment

FR 4.4.1 The minimum measurement of the touch panels shall be 2.4 metres wide and 0.9-metre-high, and the thickness shall be 0.01m when the contact is closed (and the time is stopped). They shall extend 0.3 metre above and 0.6 metre below the surface of the water. The equipment in each lane shall be connected independently, so it may be controlled individually. The surface of the panels shall be of a bright colour and shall bear the line markings approved for the end walls.

FR 4.4.2 Installation - The touch panels shall be installed in a fixed position in the centre of the lanes. The panels may be portable, allowing the pool operator to remove them when there are no competitors.

FR 4.4.3 Sensitivity - The sensitivity of the panels shall be such that they cannot be activated by water turbulence, but will be activated by a light hand touch. The panels shall be sensitive on the top edge.

FR 4.4.4 Markings - The markings on the panels shall conform with and superimpose on the existing markings of the pool. The perimeter and edges of the panels shall be defined by a 0.025 metre black border.

FR 4.4.5 Safety - The panels shall be safe from the possibility of electrical shock and shall not have sharp edges.

FR 4.5 With Semi-Automatic Equipment, the finish shall be recorded by buttons pushed by Timekeepers at the finish touch of the swimmer.

FR 4.6 The following accessories are essential for a minimum installation of Automatic Equipment:

FR 4.6.1 Printout of all information, which can be regenerated during a succeeding race.

FR 4.6.2 Spectator readout board.

FR 4.6.3 Relay take-off judging to 1/100 of a second. Where overhead video cameras are installed they may be reviewed as a supplement to the automatic system's judgement of relay take-off. For the differential in the relays take-off the manufacturer of the device shall be consulted.

FR 4.6.4 Automatic lap counter.

FR 4.6.5 Readout of splits.

FR 4.6.6 Computer summaries.

FR 4.6.7 Correction of erroneous touch.

FR 4.6.8 Automatic rechargeable battery operation possibility.

FR 4.7 Accessories for Olympic Games and World Championships: (refer to FINA Handbook)

FR 4.8 Semi-Automatic Equipment may be used as a backup to the Automatic Officiating Equipment at FINA or other major events if there are three buttons per lane, each operated by a separate official (in which case other Finish Judges shall not be required). An Inspector of Turns may operate one of the buttons.

FR 5 through FR 12 (Diving, Water Polo, and Artistic Swimming Rules)

### **FR 13 SOUND EQUIPMENT AND PRESENTATION STANDARDS**

(Refer to FINA Handbook for specifications)

The sound equipment should include, at minimum:

FR 13.1 Amplifier-mixer system.

FR 13.2 A sound reproduction system.

FR 13.3 PA (Public Address) System (Sound reproducing system for spectators)

FR 13.4 Sound volume (decibel) meter for monitoring music sound levels both above and under water.

FR 13.5 Patch cords for interconnecting equipment properly, speaker extension lines adequate for placing speakers for optimal sound distribution.

FR 13.6 Fusing systems as needed to protect speakers and other equipment.

FR 13.7 Grounding lines to ensure safe grounding of all equipment.

FR 13.8 Safety materials to minimize potential of injury to person or equipment from stepping on or tripping over electrical or speaker lines.

FR 13.9 A stopwatch.

FR 13.10 Tools and meters as needed for initial special hookups and emergency repairs.

FR 13.11 Systems for communication between officials and sound desk.

FR 13.12 A system for monitoring and recording underwater sound continuously.

## Section 2: Canadian Facility Rules & Guidelines - Competition

### Rules

#### Preamble:

*The Canadian Facilities Rules & Guidelines – Competition are intended to provide the best possible environment for sanctioned competitions in Canada. Swimming Canada designates the authority of sanctioning competitive events to Provincial Sections for events taking place in their respective Provinces.*

*The FINA Facility Rules (FR) are those rules found in Section 1; the Canadian Facility Rules (CFR) are Canadian specific facility rules relative to the corresponding FINA FR.*

#### FR 2.1 Length

FR 2.1.1 **50.000 metres.** When touch panels of Automatic Officiating Equipment are used on the starting end, or additionally on the turning end, the pool must be of such length that ensures the required distance of 50.000 metres between the two panels.

FR 2.1.2 **25.000 metres.** When touch panels of Automatic Officiating Equipment are used on the starting end, or additionally on the turning end, the pool must be of such length that ensures the required distance of 25.000 metres between the two panels.

*CFR 2.1.1 25.000 yards. When a 25.000 yard pool is used for competitions in Canada, the times shall not be approved or used for ranking or qualifying purposes. Swimming Canada does not recognize 25.000 yard pools for record purposes.*

#### FR 2.2 Dimensional Tolerances

FR 2.2.1 The admissible tolerance in 50.00m swimming pools will be +0.010, -0.000. Tolerances will be measured as follows:

**Wall to Wall:** Minimum 50.020/Maximum 50.030. Tolerances have to be consistent 0.300 mm above to 0.800 metre below the water surface.

These measurements should be certified by a surveyor or other qualified official, appointed or approved by the Member in the country in which the pool is situated. (see Swimming Diagram 1.50m Fig 1 in FINA Handbook)

FR 2.2.2 The admissible tolerance in 25.00m swimming pools will be +0.010, -0.000. Tolerances will be measured as follows:

**Wall to Wall:** Minimum 25.020/Maximum 25.030. Tolerances have to be consistent 0.300 mm above to 0.800 metre below the water surface.

These measurements should be certified by a surveyor or other qualified official, appointed or approved by the Member in the country in which the pool is situated.

FR 2.3 **Depth** - A minimum depth of 1.35 metres, extending from 1.0 metre to at least 6.0 metres from the end wall, is required for pools with starting blocks. A minimum depth of 1.0 metre is required elsewhere.

*CFR 2.3.1 A minimum water depth of 1.20 metres, extending from 1.0 metre to at least 5.0 metres from the end wall is required for pools where diving takes place from the permanent deck or bulkhead, where the height is not more than 0.35 metres from the water surface.*

Water Depth	
Less than 1.2m	No Diving; in water starts only
1.2m – 1.35m	Diving from the permanent deck or bulkhead where height is not more than 0.35m from water surface is permitted.
1.35m (equal to or greater than)	Diving from Starting Platform (max 0.75m from water surface as per FR 2.7)

*CFR 2.3.2 The water depth at the turn end for a sanctioned competition should comply with a minimum standard depth of 1.0 metre or a reasonable variance that would meet the approved rules, policies and standard of safety of the pool facility.*

FR 2.5 **Lanes** shall be at least 2.5 metres wide, with two spaces of at least 0.2 metre outside of the first and last lanes.

*CFR 2.5.1 Lanes should be at least 1.8 metres wide or a reasonable variance that would meet the approved rules, policies and standard of safety of the pool facility.*

*CFR 2.5.2 Lanes should be at least 2.0 metres wide, or a reasonable variance that would meet the approved rules, policies and standard of safety of the pool facility, when swimming 2 swimmers per lane during distance freestyle events, 800 & 1500 metre free, as noted in CSW 3.4.2*

FR 2.7 **Starting Platforms** shall be firm and give no springing effect. The height of the platform above the water surface shall be from 0.5 metre to 0.75 metre. The surface area shall be at least 0.5 metre x 0.5 metre and covered with non slip material.

Maximum slope shall not be more than 10 degrees. The starting platform may have an adjustable setting back plate. An adjustable back stroke starting platform may also be used. The platform shall be constructed so as to permit the gripping of the platform by the swimmer in the forward start at the front and the sides; it is recommended that, if the thickness of the starting platform exceeds 0.04 metre, grips of at least 0.1 metre width on each side and 0.4 metre width in the front be cut out to 0.03 metre from the surface of the platform. Handgrips for the forward start may be installed on the sides of the starting platforms. Handgrips for backstroke starts shall be placed within 0.3 metre to 0.6 metre above the water surface both horizontally and vertically. They shall be parallel to the surface of the end wall, and must not protrude beyond the end wall.

The water depth from a distance of 1.0 metre to 6.0 metres from the end wall must be at least 1.35 metres where starting platforms are installed. Electronic read-out boards may be installed under the blocks. Flashing is not allowed. Figures must not move during a Backstroke start.

## Section 2: Canadian Facility Rules & Guidelines - Competition

### Guidelines:

#### Preamble:

*The following Facility Guidelines for sanctioned competitions reference the corresponding FINA Facility Rule (FR) and provide the minimum expectations for use in Canadian sanctioned competitions. Some competitions at the provincial and national level may have facility requirements above the minimums stated below, as outlined in Appendix A.*

**Walls** – FINA FR 2.4 details the highest possible standard for pools for competition. Other variations are possible in Canadian facilities. FINA FR Standards for dimensional tolerance and length of pool are the minimum standard required.

**Lane Ropes** – FINA FR 2.6. For Canadian competitions, a sufficient number of competition lane ropes, one for each lane are required, the colour of the lane ropes is of no consequence. Gutter lane ropes should be used when possible.

**Numbering** – FINA FR 2.8. Each starting block should be distinctly numbered for Canadian competitions. It is recommended that lane number 0 or 1, should be on the right hand side when facing the course from the starting end.

**Backstroke Turn Indicators** – FINA FR 2.9. Flagged ropes shall be suspended across the pool above the water surface, from fixed standards placed 5.0 metres from each end wall. When possible the ropes should be suspended 1.8m above the water surface.

**Backstroke Ledges** – will be used as per FINA FR 2.10 when available.

**False Start Rope** – FINA FR 2.11. May be suspended across the pool not less than 1.2 metres, where possible, above the water level from fixed standards placed 15.0 metres in front of the starting end. It should be attached to the standard by a quick release mechanism. The rope must effectively cover all lanes when activated.

**Water Temperature and movement** – as per FINA FR 2.12 or a reasonable variance that would meet the approved rules, policies and standard of safety of the pool facility. For competitions purposes, maintaining the pool temperatures as per FINA FR 2.12 is recommended.

**Lane Markings** – FINA FR 2.14. Lane Markings shall be of a dark contrasting colour, placed on the floor of the pool in the center of each lane. Lane Markings should also be placed on the end wall in the centre of each lane or on the touchpad.

**Bulkheads** – FINA FR 2.15. Should be in place as per FINA 2.15.

### Section 3: Canadian Facility Rules – Training

#### Preamble:

*The following rule is in place for all training activities taking place by affiliated Swimming Canada clubs in Canada. Training activities are defined as any club training session, in-house unsanctioned competition, or any other non-sanctioned event where diving takes place. The purpose of the CFR – Dive Entries is to inform swimming clubs, swimming facilities owners/operators and swimming coaches of Swimming Canada’s position in relation to dive entry for swimming training.*

#### Dive Entries

##### *CFR –TR01 – Dive Entries*

*Diving – A minimum water depth of 1.35 metres, extending from 1.0 metre to at least 6.0 metres from the end wall is required for pools with starting platforms.*

*A minimum water depth of 1.20 metres, extending from 1.0 metre to at least 5.0 metres from the end wall is required for pools where diving takes place from the permanent deck or bulkhead, where the height is not more than 0.35 metres from the water surface.*

*When the water depth is less than 1.20 metres, no diving is permitted.*

Water Depth	
Less than 1.2m	No Diving, in water starts only
1.2m – 1.35m	Diving from the permanent deck or bulkhead where the height is not more than 0.35m from water surface is permitted.
1.35m (equal to or greater than)	Diving from starting platform (max 0.75m from water surface as per FR 2.7)

## Appendix A: Facility Standard Comparison for Sanctioned Competitions

### Preamble

The following table represents minimum facility standards for the hosting of international, national, provincial and club invitational/developmental level competitions in existing facilities across Canada. Some competitions and hosting agreements may require a higher standard than those outlined below in order to provide the best competitive environment.

	International	National	Provincial	Club Invitational Development
Water Depth for start (diving) from starting platform (max height 0.75m from water surface)	1.35m (extending from 1.0 metre to at least 6.0 metres from the end wall)	1.35m (extending from 1.0 metre to at least 6.0 metres from the end wall)	1.35m (extending from 1.0 metre to at least 6.0 metres from the end wall)	1.35m (extending from 1.0 metre to at least 6.0 metres from the end wall)
Water Depth for start (diving) from permanent deck or bulkhead (height not more than 0.35m from water surface)	Will not be used for international competition	Will not be used for national competition	Will not be used for provincial championship competitions	1.2-1.35m (extending from 1.0 metre to at least 5.0 metres from the end wall)
Water Depth elsewhere	1.0m	1.0m or reasonable variance	1.0m or reasonable variance	1.0m or reasonable variance
Starting Platforms	Per FINA FR 2.7	Per FINA FR 2.7	Starting platforms available	Starting platforms or end wall starts
Backstroke Ledges	Per FINA FR 2.10	Per FINA FR 2.10	When available	When available
Length of Course	Per FINA FR 2.1	Per FINA FR 2.1	Per FINA FR 2.1	Per FINA FR 2.1 or CFR 2.1.1
Warm-up/Warm down pool available	Additional 50m pool required	Additional 25m or 50m pool required	Per provincial requirements	As required
Lane Width	2.5m	1.8 m or a reasonable variance	1.8m or a reasonable variance	1.8m or a reasonable variance
Lane Width 2 per lane (distance events)	n/a	Minimum 2.0m or a reasonable variance	Minimum 2.0m or a reasonable variance	Minimum 2.0m or a reasonable variance
Lane Rope Colours	Per FINA FR 2.6	Colour of lane ropes is of no consequence	Colour of lane ropes is of no consequence	Colour of lane ropes is of no consequence
Pool Temperature	25-28C	25-28C	25-28C or a reasonable variance	25-28C or a reasonable variance

## Appendix B: Swimming Canada Request for Bids (2017 – 2020)

### Preamble

The following section includes a section of the existing Swimming Canada Request for Bids (subject to change 2017 – 2020) document used in the bidding process and RFP for all National events over the current quadrennial. Included below is the section relative to the facility requirements, for reference purposes only.

### BRIEF DESCRIPTION

Swimming Canada prepares a bidding process and RFP for all National events for a quadrennial. The following information was included in the Swimming Canada Request for Bids for the 2017-2020 timeframe and is specific to the facility requirements for hosting.

#### 2.5 Swimming Canada detailed event table 2017-2020

Notes when reviewing the detailed event table (Appendix C):

- 2.5.1 Participation and visitor numbers are estimates only based upon historical data. Swimming Canada makes no guarantees to the host City regarding the number of participants. Numbers may be slightly higher or lower than estimates.
- 2.5.2 The numbers of nights are estimated based upon the typical number of participants per room and the typical number of days a team would arrive early or stay after an event.
- 2.5.3 Facility level required is as follows:
  - a. **2 x 50m pools +** : The facility has two 50 metre pools (8 lane minimum) available for competition, plus additional warm-up lanes available.
  - b. **2 x 50m pools:** The facility has two 50 metre pools (8 lane minimum) available for competition.
  - c. **1 x 50m Pool +** : The facility has a 50 metre pool (8 lane minimum) available for competition, plus a minimum of 6 additional 25 metre warm-up lanes available.

Event	Minimum Facility Level Required
Canadian Swimming Trials	A, B or C
Canadian Swimming Championships	A, B or C
Eastern/Western Swimming Championships	A, B or C
Canadian Junior Championships	A or B
CanAms	A, B or C

- 2.5.4 Swimming Canada tries hard to thoroughly plan its schedule well in advance to avoid date changes or conflicts. We do however reserve the right to change the date or format of any competition. Typically, any changes in date would be made at least 12 months out. Only in extreme cases would date changes occur within 12 months of the scheduled date.
- 2.5.5 The 2020 Olympic Trials are shown on the detailed event table, however that event bid will be awarded through a separate RFP.

## **Appendix C: New Pool Construction Guidelines**

*All clubs, communities and outside partners looking to build a new aquatic facility should contact their Provincial Swimming office for further assistance in identifying the needs of the competitive swimming community in the development of their pool construction project. Any group looking to build a new aquatic facility to host national or international competitions should contact Swimming Canada directly.*

### **Preamble:**

*This section will provide guidelines for those clubs, communities and outside partners who are undertaking new pool construction. These standards have been developed with consideration of the standards set out in Appendix A and B in an effort to ensure new pool construction facilities meet and exceed the fast-paced changes occurring in the sport. This section will outline the needs for clubs and communities looking to host competitions and will also consider the daily training environment.*

### **Conventional versus Leisure Facilities:**

Conventional facilities are rectangular or square in shape with lane ropes, flags, starting blocks and lane markings. Conventional facilities are designed to accommodate a wide range of activities including swimming lessons, recreational classes, training and competitive sport. A conventional facility build would meet the demands of a broad range of participants including:

- *Infant and learn to swim participants;*
- *Recreational swimmers;*
- *Leisure and family activity participants;*
- *Masters swimmers;*
- *AquaFit participants;*
- *Lifesaving and lifesaving sport;*
- *Competitive swimmers, divers, artistic swimmers, water-polo players, swimmers with a disability.*

*Leisure facilities, such as water features, wave pools or lazy rivers, are designed to accommodate leisure or recreational activities. Leisure facilities are in effect specialized facilities that only meet the needs of leisure swimmers and do not meet the needs of the wider, more diverse aquatic community.*

*When a facility is built with the intention of hosting swimming competitions, it can generally accommodate other user groups, sports and all aquatic participants given the parameters of the facility.*

*Competition Pool requirements: The chart below details the minimum competition pool requirements for clubs and communities looking to host the following level of competitions. Each province has different minimum requirements for hosting provincial competitions, contact the Provincial Swimming Office directly.*

	Local/Regional Competitions	Provincial	National
Water Depth for start (diving) from starting platform (max height 0.75m from water surface)	2.0m (extending from 1.0 metre to at least 6.0 metres from the end wall)		
Water Depth elsewhere	1.25m	2.0m	
Starting Platforms	Per FINA FR 2.7		
Backstroke Ledges	Per FINA FR 2.10 preferred	Per FINA FR 2.10	
Length of Course	Per FINA FR 2.1		
Number of Lanes	6	8	10
Warm-up/Warm down pool available	n/a	Additional 25m pool required; 50m pool preferred	
Number of lanes in Warm-up pool	n/a	5	8
Lane Width	2.0 minimum and 2.5 preferred	2.5 preferred	2.5 required
Lane Rope Colour	Colour of lane ropes does not matter		
Deck Space	200	Minimum 700 people	
Deck Seating	100	Minimum 500 people	
Spectator Seating	200	Minimum 750 people	
Meeting Space	2-4 rooms varying size	4 rooms varying size	5 rooms varying size
Electronics/Timing Equipment	Electronic timing system (OMEGA) preferred	Electronic timing system required. Video back-up system with electronics (OMEGA) preferred	

	Local/Regional Competitions	Provincial	National
Scoreboard	Electronic Scoreboard preferred	Electronic Scoreboard required	Electronic Scoreboard required; Video board preferred
Change rooms	Male, Female, Family/Universal	Male, Female, Family, Officials, Universal	
On-deck equipment room	Preferred	Required	
Minimum lighting	Minimum 600 lux	Minimum 1000 lux	Minimum 1500 lux

**Additional Considerations:**

Useable deck space is an important consideration when building a new facility. Space for the swimmers on deck during the competition is crucial, but also important is the deck space required for officials. Ample space behind the starting platforms needs to accommodate up to 3 officials and 12 swimmers per lane.

As noted in the chart above, an on-deck equipment room will aid in the useable deck space during a competition as a way of storing lane line reels, and non-required facility equipment.

**Daily Training Environment Requirements:** The following minimum requirements are necessary to allow for a facility to provide a daily training environment for club programs. The following requirements would not necessarily allow for the facility to also hold competitions. Considerations for the Daily Training Environment should consider the number of swimmers using the facility at one time. The preferred lane width for swimmers above the provincial level is 2.5m to ensure safe and quality training space is available, contact the Provincial Swimming Office to confirm the potential level of the swimmers training at the facility.

	Daily Training Environment
Water Depth for start (diving) from starting platform (max height 0.75m from water surface)	2.0m (extending from 1.0 metre to at least 6.0 metres from the end wall)
Water Depth elsewhere	1.25m minimum
Starting Platforms	Per FINA FR 2.7
Length of Course	Per FINA FR 2.1
Number of Lanes	6
Lane Width	2.0m minimum/2.25 preferred
Lane Rope Colours	Colour of lane ropes does not matter
Change rooms	Male, Female, Family/Universal