Electrical Information – Park/Arena Users

This information is provided to groups utilizing temporary equipment connected to City of Cranbrook Electrical Services.

Depending on the facility and the type of equipment, the user group may be required to obtain a permit from the BC Safety Authority. Some of the City facilities may be covered by an annual permit while others are not. For simple electrical needs, a permit is likely not required. Generally, if your event is taking place on City property, and includes any of the following, then a permit is required:

- Uses a generator (s)
- uses portable power distribution panels
- uses multiple pieces of electrical equipment, such as extensive lighting for stage performances
- uses products that need to be assembled or modified (i.e. require more than just being plugged in)
- uses more than 2 x 20 amp 120 V circuits or has connections greater than 5kw

It is the user group's responsibility to outline their electrical requirements when they book the facility. All electrical requests must be reviewed by a City electrician. Only City electrician, or designated contractor, can perform any electrical connections/disconnections for the type of work that would be required of a permit. Only City provided power distribution panels can be used at City facilities. The City does not guarantee that staff or equipment are available for an event so requests should be submitted as early as possible, generally a minimum of one month in advance of the event. A fee for services/equipment may be billed back to the user group. **NOONE** except City electricians or designated contractors are permitted to work on any electrical equipment, and City electricians are required for have final inspection on all installed equipment prior to energizing – therefor it is very important to request electrical services well in advance of the event.

Procedure for requesting electrical services at an event/venue would be:

- 1. User group contacts the Recreation & Culture Department to book the appropriate facility. At this time, user group identifies power requirements they are looking for, by filling out the Electrical Services Request Form.
- 2. Within one week of receiving this information, City electrician will provide feedback as to whether a permit is required (i.e. Temporary Operating Permit for an Entertainment Event). City electrician will also advise the user group as to whether the request can proceed, whether staff/equipment is available, along with any other conditions that may apply. A site plan that identifies power locations may be required.
- 3. User group must ensure any electrical equipment (including generators) used complies with BC Safety Authority regulations for Approved Certification Marks for Electrical Products, and have the appropriate outdoor weatherproof requirements. Available at http://safetyauthority.ca/sites/default/files/approved_certification_marks_for_electrical_products_be3 071019 3 rev 05.pdf

<u>Fees for power use are outlined in the Community Services Fees and Charges bylaw.</u> Ensure you check all your connections and the condition of your extension cords. If staff are called outside normal operating hours, the user group may be assessed an additional fee – unless the problem lies with City equipment.

Power Availability (Maps available)

Western Financial Place

- 600 AMPS 3 phases, 120/208 volts
- 200 AMPS 3 Phase, 120/208 volts (or can be combined with below for one 400 Amp service)
- 200 AMPS 3 phases, 120/208 volts
- Front of House 60 AMP 3 phases, 120/208 volts
- Shore Power 3 x 50 Amp Service available
- Spotlight Receptacles 4 x 20 Amp 125 Volt Twist Lock Receptacles available above concessions.

Memorial Arena

- 100 Amp 3 phases
- 60 Amp 3 phases

Rotary Park

Rotary Bandstand	BREAKER	RECEPTACLE	
4	20 Amp	GFCI receptacle	
2	40 Amp	50 Amp receptacle	

*NOTE – if using the bandshell and you are not getting power – first push the RESET button on the outlet (there is a TEST button, and a RESET). Most times, pressing the RESET, this will restore power. There is also a green LED indicator on the face of the plug – if it is lit, then 120v power is present. Power is confirmed prior to an event – almost every time there has been a power issue, it has been an issue with the user group's equipment – check all your connections and the condition of your extension cords. If staff are called outside normal operating hours, the user group may be assessed a fee – unless the problem lies with City equipment.

Pedestal Power by 10th Ave	BREAKER	RECEPTACLE
2	15 Amp	GFCI receptacle
2	40 Amp	60 Amp Meltric receptacle

Pedestal Power by South Fence	BREAKER	RECEPTACLE
2	60 Amp	60 Amp Meltric receptacle
2	20 Amp	GFCI receptacle

Moir Centennial Athletic Park

Moir Main (by concession bldg)	BREAKER	RECEPTACLE
1	100 Amp	100 Amp Meltric receptacle
1	60 Amp	60 Amp Arctite pin/sleeve receptacle
1	50 Amp	60 Amp Arctite pin/sleeve receptacle
4	20 Amp	GFCI receptacle
Moir Upper Field	BREAKER	RECEPTACLE
1	100 Amp	100 Amp Meltric receptacle
1	60 Amp	60 Amp Meltric receptacle
1	50 Amp	Hubbell twist lock receptacle
1	30 Amp	30 Amp RV recptacle
3	20 Amp	GFCI receptacle
Moir Lower North	BREAKER	RECEPTACLE
4	20 Amp	GFCI receptacle
Moir Upper South	BREAKER	RECEPTACLE
4	20 Amp	GFCI receptacle

Idlewild Park

- Amphitheatre 5 x 15 Amp Circuits. (one with a single outlet, two with two outlets)
- Ice Rink Building one 15 Amp GFCI plug

Baker Park

- 2 receptacles (total of 4 plug ins) - total of 20 amp in SW Corner of the Park

Cranbrook Curling Rink

- 125 Amp 3 phase tied in from electrical room
- 70 Amp 3 phase (NE Corner) and one 50Amp receptacle

Electrical Rules to Note

Marking of Equipment

All electrical equipment shall be marked in accordance with rule 2-100.

Also note: http://safetyauthority.ca/sites/default/files/approved_certification_marks_for_electrical_products_bear 071019 3 rev 05.pdf

Recognized mark or label on electrical equipment:

Generators

All electrical portable generators are to bear acceptable approval labels in accordance with the current BC Electrical Code requirements. Rule 2-024 and Directive E3-0604141 Grounding to be compliant with BC Electrical Code rules, 10-106, 66-200, 76-004.

Supporting of Conductors

- (1) Only decorative lighting, signal, communication, and control circuits shall be supported on structures that support amusement rides.
- (2) The decorative lighting and control circuits of one amusement ride shall not be installed on a supporting structure of another ride.
- (3) Overhead conductors shall have a vertical clearance to finished grade of not less than the following:
 - (a) across highways, streets, lanes, and alleys: 5.5 m;
 - (b) across areas accessible to vehicles: 5 m; and
 - (c) across areas accessible to pedestrians: 3.5 m.

Protection of Electrical Equipment

Electrical equipment shall be protected in accordance with Rule

2-200 Electrical equipment shall be installed and guarded so that adequate provision is made for the safety of persons and property and for the protection of the electrical equipment from mechanical or other injury to which it is liable to be exposed.

Grounding & Bonding

- (1) The service and electrical distribution shall be grounded in accordance with Section 10
- (2) Notwithstanding Rule 10-908
 - (1) (a), grounding electrodes for mobile generators shall be permitted to be connected using single-conductor plug-in locking-type connectors.

Wiring Methods

- 1) Except as permitted in Rules 66-450 to 66-458, wiring methods shall be in accordance with Section 12 and suitable for the condition of use.
- 2) Cords, cables, conduits, and other electrical equipment shall be protected from physical damage.
- 3) Cords shall be of the hard-usage type, in good repair, and
 - (a) provided with strain relief where they enter into enclosures and plug-in connectors:
 - (b) if exposed to the weather, be of a type suitable for outdoor use; and
 - (c) where plug-in connections are used,
 - (i) have connectors and receptacles that are rated in amperes and designed so that differently rated devices cannot be connected together;
 - (ii) have the female connector attached to the load end of the cord; and
 - (iii) be polarized if an ac multi-conductor connector is used.

- (4) Notwithstanding Subrule (3) (c) (ii), for single-conductor cables the grounded conductor and the bonding conductor shall be permitted to have the female half connected to the supply end of the cord.
- (5) With the exception of amusement parks, midways, carnivals, home shows, and tent meetings, receptacles rated 15 A, conforming to CSA configuration 5-15R rated 120 V, hospital grade, and protected by a fuse or circuit breaker rated not greater than 20 A, shall be permitted for temporary lighting installations within the Scope of this Section, where the loads are of an intermittent nature.
- (6) Temporary wiring for portable stage equipment shall be in accordance with Rules 44-350, 44-352, and 44-356