

SD#5

Playground Handbook



Release

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INTRODUCTION

The purpose of this Handbook is to offer PAC's a guideline to help clarify the process and involvement that is required to install playground equipment. Installation of play structures is a project that has numerous vested stakeholders all committed to the same goal of providing children with a fun and exciting place to play.

BACKGROUND

This Handbook exists as it was recognized that PAC's, Principals, School Districts, Manufacturers' and professional Installers, all need a common ground of understanding. The scope of work a Playground project requires should be realized prior to making the commitment. From the initial discussion to the completion of an installation, a Playground can take anywhere from two (2) years to ten (10) years to finalize. With the numerous hours of work that is required by all the stakeholders, the intention of this Handbook is to establish that up front.

SCHOOL BOARD POLICY

TO BE UPDATED IF REQUIRED

ROLES & RESPONSIBILITIES

SCHOOL DISTRICT

The School District assumes the liability of the Playground once it is installed. Playgrounds are governed by current CSA (Canadian Standards Association) Standards “Children’s Playscapes and Equipment” which must be strictly adhered to and in some cases exceeded.

To this end, certain requirements are mandatory such as the type of equipment that is purchased, as well as the source of aggregate (pea gravel) used at the base of the equipment.

NOTE: The School District reserves the right of final approval for the manufacture selected to provide equipment and the supplier of aggregate.

For the purpose of insurance, all donated or purchased playground equipment becomes the sole property of the School District.

PRINCIPAL

A Principal’s role is to facilitate and mediate the installation of the playground equipment between PAC’s and to some extent the School District. They are responsible for attending meetings, assisting in the selection of the site and other items pertinent to the installation of equipment.

PAC

Parent Advisory Council has a very large role to play in the installation of playground equipment. Along with acquiring the funds to purchase new playground equipment, PAC’s are expected to develop a plan and assume all costs of the installation including equipment, containment, protective surfacing material and any excavation work required.

It is recommended that a five (5) person committee be formed that is willing and able to see the project through from start to finish.

This commitment consists of approximately forty (40) volunteer hours per person with each person looking after a portion of the project implementation. Each person’s role is defined in the ‘PAC’s Next Step’ section.

MANUFACTURER

The manufacturer's role is to provide quality playground equipment that meets CSA Standards. Letters of compliance with this standard from the equipment manufacturer must be retained with all other documents for the equipment.

They will also be integral to the placement of equipment by providing drawings and installation instructions. PAC's may also request a Project Planner Guide.

PROFESSIONAL INSTALLER

A professional installer is present during the entire installation of equipment. Their job is to ensure that the equipment is placed correctly within encroachment areas and generally oversee the site. An installer provides the School District the assurance that the equipment has been installed to CSA Standards.

STARTING POINT

Once the discussion has progressed to a commitment that playground equipment will be installed and fundraising has been earmarked to pay for equipment the following occurs:

STAKEHOLDER MEETING

A stakeholder meeting is to be arranged either by the Principal or the PAC committee. The expected participants in the meeting are the Facilities Manager, School District Secretary/Treasurer, the Principal, the PAC Committee.

The discussion will center on the site intended to house the new equipment with certain factors taken into consideration such as underground utilities and sprinkler systems, bylaws, impact of existing fields, future District expansion plans and any portable locations.

The timeline of installation will also be discussed. A playground installation must be scheduled to ensure that the School District has the available manpower to answer questions, supervise crucial aspects of the site preparation and arrange to have Maintenance install cribbing and/or borders after the equipment is installed and prior to the pea gravel fill.

SET DATE OF INSTALLATION

It is recommended that a date of installation is determined early in the process to provide all stakeholders and volunteers with enough advanced notice to prepare for the project completion.

PAC'S NEXT STEP

To ensure that PAC's know what is expected of their participation in this project, this section provides details of the requirements as well as Committee Roles.

PAC is responsible to pay for all materials, contract services, heavy machinery and playground equipment to be installed.

PAC COMMITTEE ROLES

This list is a general overview of the Roles and Responsibilities of a Playground Committee. It is not intended to be a strict guideline just a demonstration of the requirements that an installation demands and should be adjusted as the project necessitates.

1. **Committee Head** is responsible to oversee the entire playground installation from budget planning, fundraising and implementation as well as making sure each member of the committee is on task. This person is also the contact for the Principal and School District

2. **Coordinator** is responsible for ensuring the heavy equipment, security, temporary fencing, etc. is available and in place. The Coordinate also assists the Committee Head with other duties as required

3. **Fundraiser** is responsible for all the aspects of fundraising for the project. This includes both equipment and installation costs. It can be expected that half the budget will be for the equipment while the other half for the site preparation and installation

4. **Purchaser** is responsible for sourcing and purchasing the equipment, materials and supplies for the installation

5. **Volunteer Coordinator** is responsible for ensuring that enough people are available and willing to work on the different aspects of the installation as needed. Someone is to be designated to be in charge of site safety

QUOTES & FUNDRAISING TO DETERMINE A BUDGET

Request quotes from playground manufacturer(s) and local suppliers to help determine a budget. **NOTE:** See Installation Requirements.

There are numerous ways to raise money with Gaming Grants, Hot Lunches and sales of chocolates to name a few. To ensure that the PAC has raised enough money to achieve their goals, provide a budget to the School District with a contingency amount for incidentals.

E.g.

Budget	20,000.00
15% Contingency	<u>3,000.00</u>
	<u><u>23,000.00</u></u>

Actual

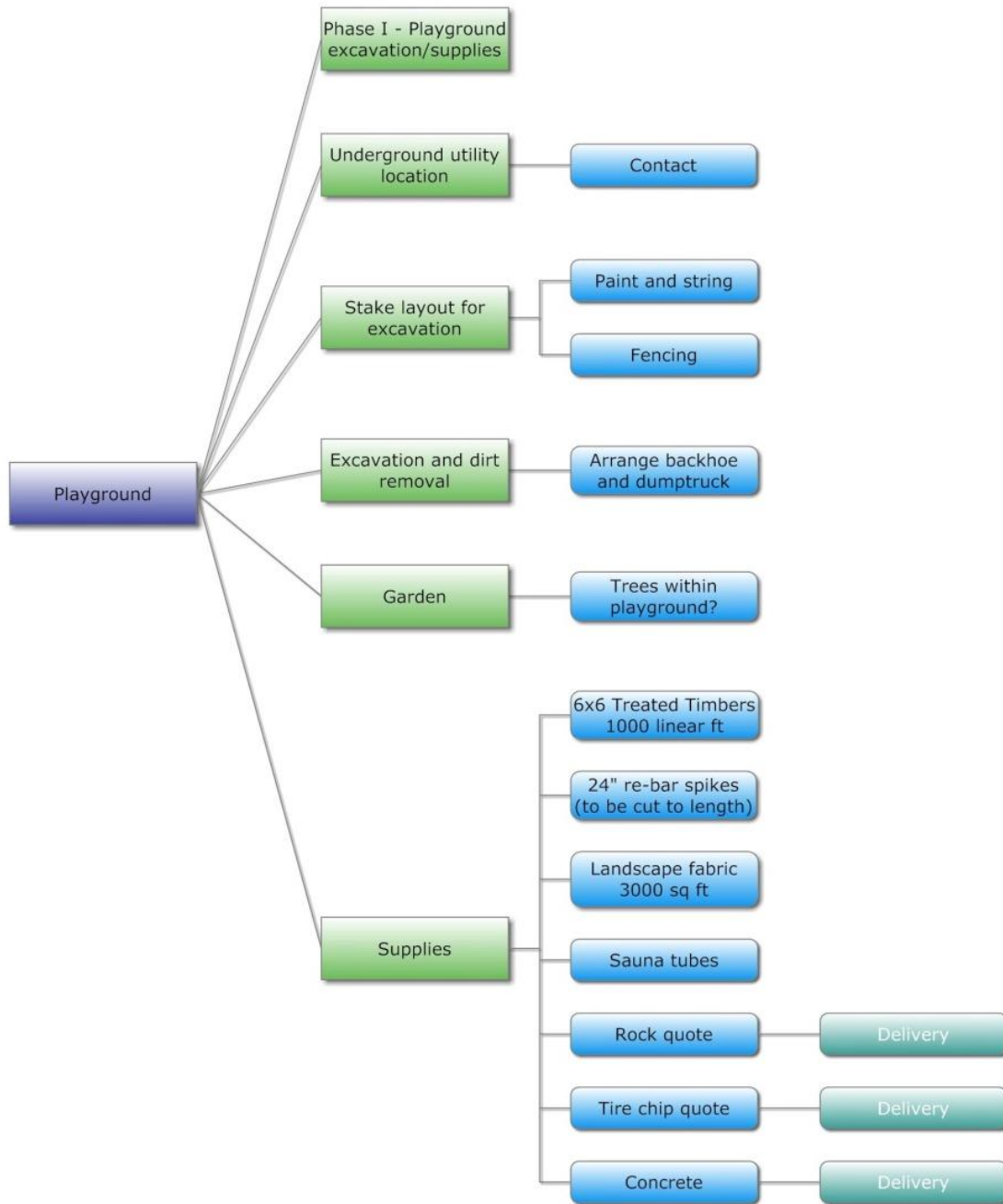
Equipment	10,559.85
Gravel	11,262.09

Landscape Fabric	413.26	
Washers	26.39	
Re-bar	0.00	donation
Timbers	1,319.71	
Sona tubes	0.00	donation
Cement	480.45	
Supervision	2,850.75	
Total	26,912.50	
Parent donation	-500.00	
SD allotment	-5,000.00	Blue Imp
Grand Total	<u>21,412.50</u>	

PAC APPROVAL

Once the budget has been determined and the fundraising is in place, the PAC can approve the costs and submit the information to the school Principal and the School District to proceed with the project. It is recommended that the Committee Head and/or Coordinator meet with the Principal and School District to confirm date of install, finances and other business to finalize this part of the process.

PROJECT SCOPE



It's a good idea to plan the scope of the project so that PAC understands each phase of work that is required and who will be responsible for each part of the project.

Ensure that a project coordinator oversees all aspects of the project with other committee members providing progress reporting throughout the phases of the project.

SITE SELECTION

Site selection is to be conducted with the school Principal and approved by the Facilities Manager at the School District.

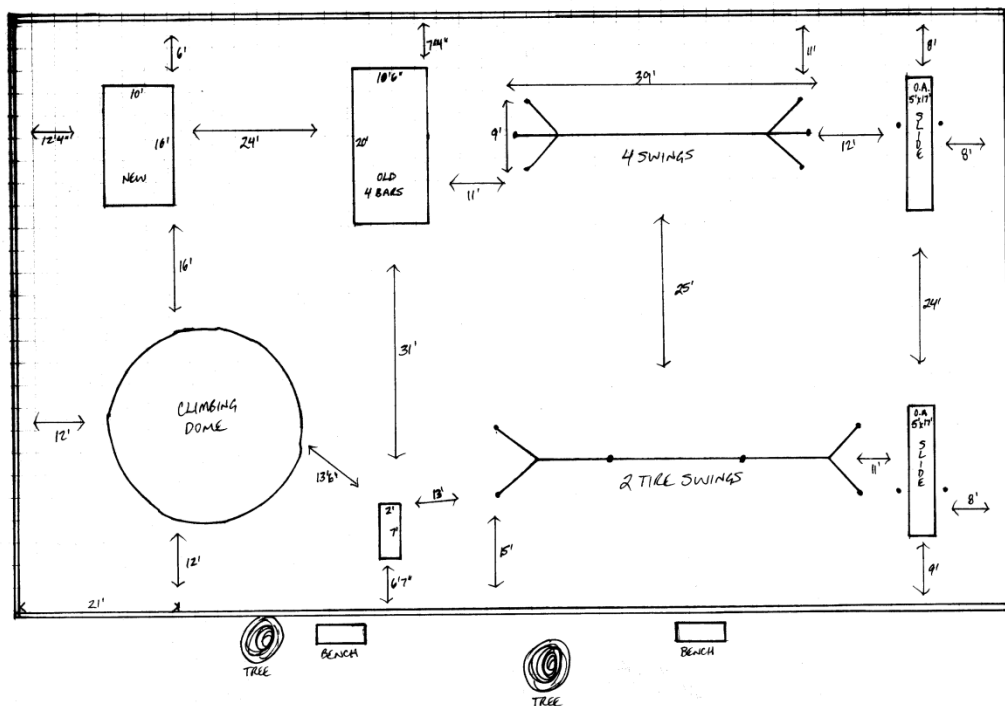
(a) The equipment must be situated away from fire exits, fire routes, plowing routes, potential portable sites, high traffic areas, underground and overhead service utilities, waterways, rocky terrain, underground sprinkler systems and hard surfaces, and must minimally affect the operations of grass cutting.

(b) The location must be clearly visible from the school and, wherever possible, within public view.

(c) The location must be a well-drained area.

It's possible that the manufacturer will require a Site Map to determine the exact placement of the equipment. The area will need to be measured indicating all the existing structures and possible obstacles. There may be maps on file at the School District.

NOTE: Underground utilities must be determined. There are 'one call' services available that assist in making sure all the utilities are contacted. See *Installation Requirements*



PLAYGROUND EQUIPMENT

Playground equipment has a number of factors to take into consideration prior to ordering.

To ensure that School District #5 adheres to the dictates of local regulations in regards to CSA Standards, PAC's must follow certain guidelines as follows:

Playground standards in Canada

The [Canadian Standards Association \(CSA\)](#) has developed the only nationally recognized standard on children's play spaces and equipment. The CSA Standard provides detailed information about materials, installation, and strength of the equipment, surfacing, inspection, maintenance, performance requirements, and access to the playground, play space layout, and specifications for each type of equipment. The CSA first published guidelines for playgrounds in 1990 which have been subsequently revised and updated periodically.

The standards are voluntary and are not a law. The standards apply to public playgrounds, such as those on school grounds, in parks, or at day care centers or motels. It does not apply to private, residential (home) playgrounds or indoor facilities. There is no national enforcement body for playground safety; however, some jurisdictions in Canada have passed regulations requiring public playground operators to ensure that their playgrounds meet the CSA Standard. For example, in some provinces, playgrounds at day care centers may be required to meet the standard in order for the center to get an operating license. The standards are not retroactive and only apply to play spaces and equipment installed after the date the Standard was published. The CSA does not certify playgrounds or specific pieces of play equipment.

For more information about the standard or to obtain a copy of the standard, contact <http://www.csa.ca/cm/ca/en/home> or 1-800-463-6727.

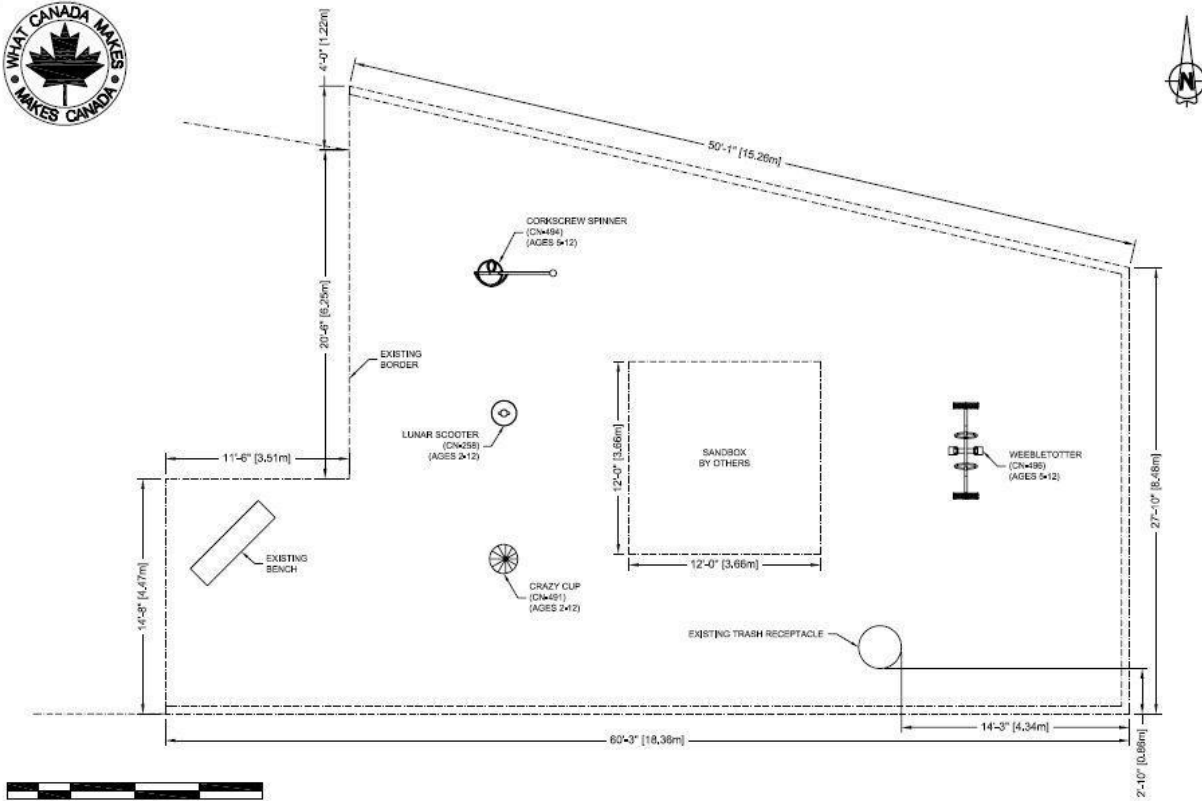
Manufacturer selection:

There are numerous Manufacturers in North America trying to sell their playground equipment to be used in school yards, not all of the equipment adheres to CSA Standards. To install equipment on School District #5 property PAC's must ensure that any play structures they plan on purchasing meets or exceeds CSA Standards to avoid having to return the equipment to the manufacturer.

Layout

There are options for assistance with playground layout. Most manufactures provide layout services and drawings but there are also professional Playground Planners available for a fee.

NOTE: Be aware that each piece of equipment is larger than its actual size due to encroachment zones; this has to be taken into consideration. See Diagram next page:



SCHOOL DISTRICT SUPPORT ROLE

Equipment and financial considerations

The School District is able to assist with the facility to provide receiving and short term storage of equipment as well as financial consideration such as a 'trust fund' arrangement for large ticket equipment. Also, to save on taxes, the District is willing to be invoiced for the equipment and supplies. They will invoice the PAC for reimbursement.

NOTE: School District will allot up to a maximum of \$5,000.00 to assist the PAC with the installation and incidentals of playground installation.

Shipping to School District #5

940 Industrial Road #1

Cranbrook, BC V1C 4C6

Ph: 250.417.2057

Fax: 250.489.5460

INSTALLATION

REQUIREMENTS

UNDERGROUND UTILITIES

Underground utilities must be determined. There is a free ‘one call’ service available that contacts all the utilities required prior to a site excavation.

BC OneCall – phone: 1-800-474-6886 www.bconecall.bc.ca

MATERIALS

NOTE: All materials used must meet or exceed current CSA Standards

Mandatory materials to be provided by PAC's:

- Concrete (25mpa type 10 with air) **NOTE:** most local suppliers require a minimum order to provide a Saturday or Sunday delivery, be sure to confirm delivery times
- Sona tubes – 10 foot x 12 inch diameter
- 2"x 8"x 8" treated wood blocks (for postholes)
- 6x6 treated timbers for perimeter, cribbing may be required on an unlevelled site
- 5/8" re-bar
- Non-woven Geotextile (**NOTE:** this is not typical landscape fabric that is obtained by a local gardening supplier, it is a special order fabric that can take two to three weeks to receive. Be sure to order the fabric in advance of the install.)
- Pea gravel – 3/8" double washed to a minimum depth of 18"

SUPPLIERS

Non-woven Geotextile

Nilex Civil Nonwoven Geotextile 4551

Size: 4.57m x 91.5m

Weight: 96 kg

<http://www.nilex.com/products/geotextiles>

ABBOTSFORD	CALGARY
1781 Clearbrook Road	9222 – 40 Street SE
Abbotsford, BC V2T 5X5	Calgary, AB T2C 2P3
P: 604.420.6433	P: 403.543.5454

F: 604.420.0445	F: 403.543.5455
Toll free: 1.800.663.0478	Toll free: 1.888.543.5454
abbotsford@nilex.com	calgary@nilex.com

Geotex 601

Size: 4.57m x 91.5m

Weight: 96 kg

<http://www.brockwhite.com/0p46i803c174/geotex-601/>

Brock White Geotechnical (AGES)
2703 – 61 Avenue SE
Calgary, AB T2C 4X3
P: 403.287.5889
F: 403.287.5881
Toll free: 1.877.287.5889

Pea gravel

Hurlburt Rock Products
Box 1119, No. 2 Hwy & Springpoint Road
Fort MacLeod, AB T0L 0Z0
P: 403.553.4705
F: 403.553-2878
Toll free: 1.877.426.6273

Timbers and re-bar

RONA	Home Hardware
1500 Theatre Road	1901 McPhee Road
Cranbrook, BC V1C 7G1	Cranbrook, BC V1C 7J2
P: 250.426.2006	P: 250.426.6288
F: 250.426.2110	
Home Depot	
2000 McPhee Road	
Cranbrook, BC V1C 0A3	
P: 250.420.4250	

To Whom It May Concern,

School Elementary PAC is installing Playground equipment this summer and we are looking for supply of the following:

3) 10' long x 12" diameter Sauna tubes

1000 linear feet of 6x6 treated timbers

Any discounts or donations would be greatly appreciated as we rely greatly on the generosity of the community to provide our students with playground equipment.

Thank you for your time.

Regards,

Name,

PAC Chair, *School* Elementary School

HEAVY MACHINERY



Backhoe or Mini-excavator – to level site and excavate proper depth

Dump truck – to haul excavated tailings away

Bobcat – to move and spread pea gravel

NOTE: Be sure to have a heavy equipment operator available

TOOLS

An example of the Tools that are required to install the playground equipment; tools may change depending on manufacturer and type of equipment being installed.

6	Allen Wrench 5/16"
4	Buckets and rags
2	Crow bars
1	Drill (1/2" drive, rechargeable)
20	Ear plugs
300 ft	Extension cords
4	Gloves (work and rubber)
2	Hammers
2	Ladders (6' step)
2	Levels
1+	Power source
5+	Rakes
5+	Shovels (spade and flat nose)
2	Sledge hammer
2	Socket sets (3/8" drive)
200 ft	String line
2+	Tape measures

1	Tin snips
2	Upside down marking paint
6	Utility knife
2	Vice grips
3	Wheelbarrows
2	Wrench set (open and box end)

PROFESSIONAL INSTALLATION

A Professional Installer is a person(s) who ensures that all playground equipment is installed correctly to specs. With numerous installations under their belt, they are the expert on-site and have the answers to most of the questions.

The purpose of the Professional Installer is to direct the placement of the pile holes and make sure that everything is level, this is crucial to a proper install. They also assist with the specific elements of the installation by making sure that the sequence of events is followed.

***Request a [Project Planner](#) from the company providing the installer.

VOLUNTEERS

Volunteers are crucial to the installation of Playground equipment. They are the most important asset of the project.

The following list indicates some of the Volunteer requirements:

- Depending on the scope of the project 10+ Volunteers will be required
- Liability Insurance - Volunteer coverage is provided through Schools Protection Branch
- First Aid kit and emergency numbers
- Food and beverages
- Water
- Childcare

See the next page for an example of a Volunteer Waiver.

EXAMPLE OF A VOLUNTEER WAIVER OF LIABILITY (Not a legal document)

Thank you for working today. We greatly appreciate your assistance and commitment to the installation of Playground Equipment at our school. We are required to keep accurate records of all volunteers who work on site for this project. This form is an agreement that you release Amy Woodland Elementary School Parent Advisory Council (PAC) of all liability in effect from the signing date.

This Release and Waiver of Liability (the "Release") executed on this ____ day of _____ 20____, by _____ (the "Volunteer") in favour of Amy Woodland Elementary School Parent Advisory Council (PAC), a non-profit organization, their affiliates, executive, school staff, officers, employees and anyone else involved with this project (collectively, PAC).

The Volunteer desires to work as a volunteer for PAC and engage in the activities related to being a volunteer (the "Activities"). The Volunteer understands that the Activities may include the use of heavy machinery, working around heavy machinery, construction and installation of Playground Equipment.

The Volunteer hereby freely, voluntarily and without duress executes this Release under the following terms:

Release and Waiver: Volunteer does hereby release and forever discharge and hold harmless PAC and its successors and assigns from any and all liability, claims and demands of whatever kind or nature, either in law or in equity, which arise or may hereafter arise from Volunteer's Activities with PAC.

Volunteer understands that this Release discharges PAC from any liability or claim that the Volunteer may have against PAC with respect to bodily injury, personal injury, illness, death, or property damage to themselves and any minor children present that may result from the Volunteer's Activities with PAC, whether caused by the negligence of PAC or its affiliates or otherwise. Volunteer also understands that PAC does not assume any responsibility for or obligation to provide financial assistance or other assistance, including but not limited to medical, health or, disability insurance in the event of injury or illness.

Medical Treatment: Volunteer does hereby release and forever discharge PAC from any claim whatsoever which arises or may hereafter arise on account of any first aid, treatment or service rendered in connection with the Volunteer's Activities with PAC.

Assumption of Risk: The Volunteer understands that the Activities includes work that may be hazardous to the Volunteer; including but not limited to, construction, loading and unloading, installation and working around heavy equipment.

Volunteer hereby expressly and specifically assumes the risk of injury or harm in the Activities to themselves and any minor children present and releases PAC from all liability for injury, illness, death, or property damage that may result from the Activities.

Insurance: The Volunteer understands that PAC does not carry or maintain health, medical, disability or any other kind of insurance for any Volunteer.

Each Volunteer is expected and encouraged to obtain his or her own medical or health insurance coverage.

Photographic Release: Volunteer does hereby grant and convey unto PAC all rights, title and interest in any and all photographic images and video or audio recordings may by PAC during the Volunteer's Activities with PAC including, but not limited to, any royalties, proceeds or other benefits derived from such photographs or

recordings.

Other: Volunteer expressly agrees that this Release is intended to be as broad and inclusive as permitted by the laws of British Columbia and Canada and that this Release shall be governed by and interpreted in accordance with the laws of British Columbia and Canada. The Volunteer agrees that implied clauses and provisions not stated are enforceable with this Release and therefore forever discharge and hold harmless PAC.

IN WITNESS WHEREOF, Volunteer has executed this Release as of the day and year first above written.

Volunteer Name (Print): _____

Volunteer Signature: _____

Today's Date: _____

Volunteer's Address: _____

Phone Number: _____

*******If the volunteer is under the age of 18 a parent or legal guardian must sign*******

Parent Signature: _____

Emergency Contact

Name: _____ **Relation:** _____

Phone: _____

SITE PREPARATION

ONE WEEK PRIOR TO INSTALL



Level site with temporary fencing

- Level site and excavate to proper depth

The Professional Installer may want to inspect site prior to installation of equipment

- Secure with temporary fencing
- Re-confirm volunteers
- Confirm delivery of surfacing
- Confirm security for nights of construction
- Confirm access to water

DAY ONE

- Layout pile holes and perimeter
- Auger pile holes and clean up tailings
- Pre-assemble components
- Assemble equipment



Unpacking the playground equipment



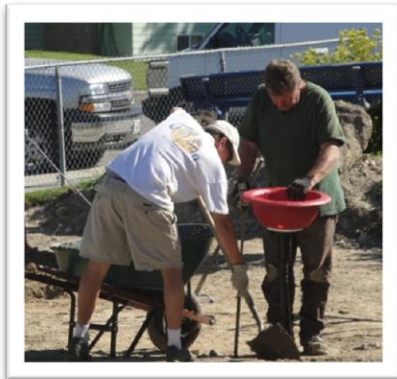
Digging Pile holes

COMPLETE EQUIPMENT INSTALLATION

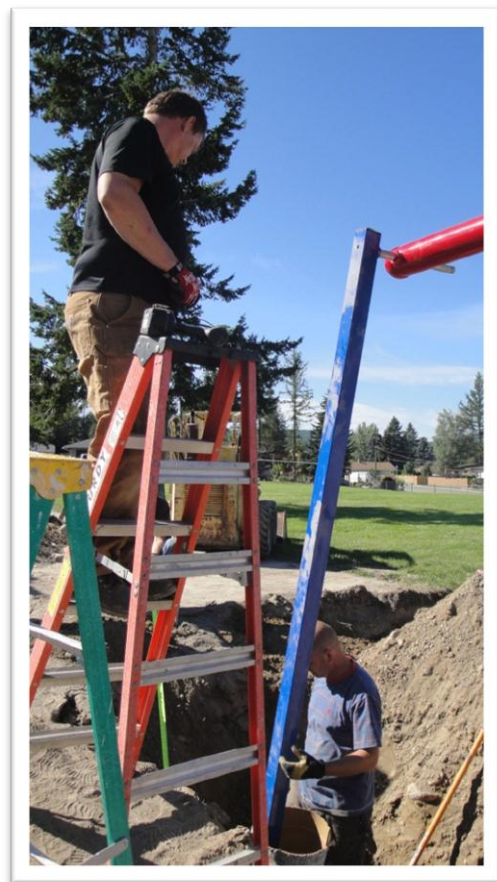


Cutting sona tubes

- Place Sona tubes, cut to length
- Plumb and level equipment
- Tighten all bolts
- Pour concrete piles
- Clean spilled cement
- Install border (see SD Maintenance) and place Geotextile
- Spread and rake pea gravel (see SD Maintenance)



Pouring concrete piles



Plumb and level equipment



Checking for level

SD MAINTENANCE

School District Maintenance installs the borders and cribbing necessary to surround the playground using the 6x6 treated timbers and 5/8" re-bar. There may be a time difference with the placement of the pea gravel to ensure maintenance has the time and personnel to complete the job.



Spreading pea gravel

CLEAN UP

The site must be free from debris and ready for school children to play. Please ensure that the following is completed:

- Garbage removal
- Tailings from augured holes
- Excavated dirt

SUMMARY

If you think that a modern playground is anything like what you grew up with there is a vast difference; playgrounds have become much safer and therefore installations are considerably more involved than the small work bee of twenty years ago.

Playgrounds are now fabricated to be innovative as well as being designed for safety and durability. To that end, the time and effort it takes to properly install play structures, while rewarding, is demanding and onerous.

Other factors to considering with a Playground installation, is that equipment is only half the cost, the other half of a budget is used up in site preparation. This is surprising when attention is usually focused solely on the equipment.

With a lot of time, organization and work, the end result of the team effort to install a playground is a legacy of children climbing, swinging and spinning on play structures that they will get hours of enjoyment out of.



RESOURCES

Websites:

- <http://www.safekidscanada.ca/professionals/safety-information/playground-safety/standards/standards-in-canada.aspx>
- <http://www.csa.ca/cm/ca/en/home>
- <http://www.bced.gov.bc.ca/schools/bcmap.htm>
- <http://www.blueimp.com/>
- www.gpioutdoordesigns.com
- <http://awes.sd5.bc.ca/Welcome.html>

Project Planner:

- GPI Outdoor Designs Inc. (Tel) 403-242-8740, (Toll Free) 877-242-8799, (Fax) 403-242-8796

Other:

- Blue Imp Recreational Products of Canada (Tel) 403-526-4170, (Toll Free) 800-661-1462, (Fax) 403-529-0851
- Horizon School Division No. 67, Reference (2009) Policy Handbook
- M&L Projects Ltd., Cranbrook, BC V1C 6V9, Lanna van der Velden