



Pool Construction Phases

1. PLANS ENGINEERING, AND BUILDING PERMITS

After we reach our agreement for building your pool, a formal "swimming pool plot plan" will be drawn with the necessary detail. It will show all the details of construction as we have previously agreed upon. It usually requires several days to complete these detailed plans.

All pertinent specifications should appear on your plan. You will receive a copy of this Final Construction Plan before Excavation is scheduled. Please inspect it thoroughly. It is usually easy to make changes in the plan before work begins. But it becomes very difficult—and costly—to introduce changes after the work has been started.

So be sure that the Plan shows exactly what you want! If something troubles you, let's talk it over immediately. Unless you tell us otherwise, your pool will be built as close to this plan as possible.

NOTE: Changes after this step will result in change order fees of \$500 per set of revised drawings.

NOTE: \$5,000 deposit is required at this point to move forward with engineering.

Engineering

After your plans are approved, plans are sent to engineering, once engineering has been completed any changes at this point will result in change order fees (\$500) and could potentially result in construction timeline delays.

HOA

If you live in an HOA, the City will require a HOA approval letter before we can move to the building permit stage. **This process is the homeowners' responsibility**, we will gladly provide you with the plans needed to submit to your HOA. Once you have an approval letter you will need to provide us with a copy so we can submit for permits.

Building Permits

Once engineering is completed everything will be taken to the Building Department for your area. They will do a formal plan check and issue the Building Permits. The time required to get these permits varies from a few weeks to a few months, depending on local requirements. If your job is in a critical soil or grading area, or has a septic tank system, the Building Department (or the health Department) may

require that an Inspector visit the site before they issue the permit. Naturally, this would mean some delay before we could begin construction.

When the permits are issued, they will be posted in a prominent location at the job site. Please do what you can to help protect them from the weather and vandals. But please DO NOT remove them to the inside of your home. They MUST remain outside so the various Building Inspectors can get to them easily. Your help in this will be greatly appreciated.

NOTE: 1st Payment up to 25% of contract total (minus \$5,000 deposit) required before excavation.

2. EXCAVATION

After the required Building Permits have been issued, Excavation will be scheduled. It is preferred that you or a responsible agent be present for the Excavation. Every effort will be made to accommodate your schedule.

The first task for the Excavators is to "pre-grade" the pool site. This provides a level "pad" on which to build your pool. Then the pool will be "staked out," or outlined with bender board and stakes. The layout will comply with the Final Construction Plan. Before actual excavation of the hole can begin, you or your agent must approve the size, shape, and location of your new pool as it is staked out in your yard.

Then the Excavation Crew will remove all the dirt within the designated layout area and will contour the bottom of your pool according to the Final Construction Plan. Under normal conditions, the average sized pool Excavation usually takes up to ten working hours over a full day to two days. Delays may occur depending on weather conditions. **NOTE: We make every effort possible to prevent any damages to concrete sidewalks, driveways and or valve boxes, water meter transponders but cannot be held responsible for damages since access to back-yard are required with heavy equipment and trucks to complete construction.**

Dirt Removal

If you want some of your dirt left on your property, please tell the Excavators exactly where and how much dirt to leave.

*Please NOTE the following important conditions:

- DIRT ONLY will be removed unless we have made other arrangements in advance. Please don't ask them to remove trash or other debris.
- Dirt removal will take place on Excavation Day ONLY.
- If you change your mind after the Excavation Crew has left, there will be an extra charge for trucks and equipment to either remove additional unwanted dirt, or to bring back clean fill.

Forms

The forms, which are placed around your pool, are precisely positioned at a predetermined grade. They are at exactly the right elevation to allow adequate drainage. It is critical that they be accurate. PLEASE DO NOT MOVE OR adjust them IN ANY WAY. If they should become moved or dislodged, please notify us immediately so we can inspect and reset them.

3. PLUMBING AND EQUIPMENT INSTALLATION

Plumbing lines from the main drain and skimmer to the equipment site and return lines back into the pool will be installed according to your Final Construction Plan. All other pipes, such as self-cleaning systems, waterfalls, therapy spa lines will also be installed at this time. In addition, the circulation, heating, and filtration system equipment you ordered will be installed at the location shown on your Final Construction Plan, unless other arrangements have been made in advance.

NOTE: In some circumstances such as unfenced new construction areas, the equipment may be installed later to safeguard against damage, vandalism, or theft. We'll discuss this in advance if it applies to you.

Plumbing normally takes one or two days to finish, if you select the In-Floor cleaning system this process will take an additional week. When the Plumbing is completed, all lines will be pressure tested to guard against the possibility of leaks. When in the pool area, please be careful not to bump or poke holes in the pipes. And let us know if you spot any leaks.

4. STEEL REINFORCEMENT

Heavy-duty structural steel reinforcement will be placed in your pool shell and blocked at least 2-1/2 inches above natural dirt. The proper installation and spacing of this steel ensure that the Gunitite will fully surround each bar. This provides the enormous structural strength and integrity your pool shell requires to withstand the surprising stress and pressure a swimming pool is subjected to.

Placing the steel usually takes two days. (The steps into your pool are usually built of solid free formed Gunitite and require no steel.)

5. INSPECTIONS

We will notify the Building Department and arrange for inspections as required by local laws at each required stage of construction. By law, work must come to a standstill until the Building Inspector approves the job. Naturally, we cannot tell you exactly when to expect him—Inspectors have busy schedules. Under "normal" circumstances, you should expect the inspection to be done within a day or two from the date of the request. Please realize, however, that in some cases it may take quite a bit longer.

Please notify us when the inspection has been done. There will either be a signature on the Inspection Card, or the installation will be "tagged." If you can't see any indication of an inspection within a reasonable time, we'll check with the Building Department. Remember: Work cannot proceed until the job is approved, since to do so would be in violation of building codes and might involve additional delay and inconvenience to you.

Also, since most Building Inspectors will not knock, please be sure that they have access to the pool construction area to do their inspection work. Some areas are now requiring "Letters of Authorization" which give specific authorization for the Inspector to enter your property if you are not home. If that is the case, you and I will need to work together to be sure that such a letter is properly posted, or that the Building Department has a blanket approval letter in their files.

NOTE: 2nd Payment up to 50% of contract total plus any change orders & additions- Before Shotcrete

6. SHOTCRETE

Shotcrete (or: structural cement) is a fascinating (but noisy!) step. It is at this stage that your pool first really begins to look like a swimming pool. The sand and cement to be used normally arrive first, to be followed by the experienced shotcrete Crew.

Shotcrete is applied by mixing cement with air in specific proportions, then injecting it under high pressure through the hose to the mixing nozzle. At this nozzle, water is first applied to the mix. This is a precision operation, and you will be impressed with the skill and workmanship displayed here. These are the craftsmen who literally shape your pool.

IMPORTANT: CURING YOUR SHOTCRETE

After your pool has been shotcrete, it must be kept moist to "cure" properly. It needs to be watered down at least four times a day for at least five to seven days. The rule is this: The wetter the better!

Spray the entire Shotcrete area with a fine spray each time until the water starts to run down the walls. Shotcrete works much like a sponge. It will only absorb so much water at one time. Naturally, during the wetting down process, some water accumulates in the bottom of your pool. Don't worry about it—it will be pumped out and the interior surface will be cleaned and prepared just before the Plaster is installed (See Step 15).

PLEASE DO NOT STEP ON ANY PART OF THE SHOTCRETE AREA FOR AT LEAST TWO (2) FULL DAYS! Spray the water from outside the pool shell.

The importance of properly water-curing your Shotcrete cannot be overstressed. It is YOUR responsibility. The Shotcrete may dry prematurely if it is not properly water cured. If that happens, it could become brittle and lose much of its natural structural strength. If you are not available to complete this step due to not being in town, a Kokopelli team member could assist. (*fees will apply for this additional service.)

7. TILE AND COPING

We will work together to select the right decorative tile for the waterline trim on your pool. Once you have made your selection, the artists from the Tile and Coping Crew will install it. They will also install brick or rock coping if you have selected that. Tile and coping usually take one or two days to install. But on complex projects, this stage could take longer. (If you chose cantilever style decking, the sequence of Steps 9 and 12 will be reversed.)

8. ELECTRIC

Just after Guniting the Electricians will install the wiring and prepare the pool equipment for safe electrical operation. The Electric Installation normally takes one day. (In some cases, this might be done before the Guniting. The sequence is not important to the construction.)

9. GAS LINES

If you have a gas or propane heater, the Gas Lines should be installed at this time. It is the homeowner's responsibility to purchase and coordinate the delivery and installation of the Propane Tank and gas lines.

10. MASONRY—ROCKWORK, WATERFALLS, ETC.

If you have ordered any masonry or rockwork, it will be done now. If you are planning to add any walls or walkways, they should be installed at this time—before decking is installed—so that the decking can be poured right up to the other face.

11. SPRINKLERS, DRAINS AND UTILITY LINES

All underground lines and pipes should be installed and marked before the decking is poured. It is a good idea to leave a few extra unused pipes under deck areas for future use (you just never know when they might come in handy!). It is also very helpful to take a photograph or two of the lines and pipes before they are permanently covered up.

12. DECKING

Forms will be set according to your Final Construction Plan by the Forming Crew. Later the same day, or perhaps the following day the deck will be poured (weather permitting). The concrete will be installed, then the cool deck will be installed once the concrete is cured.

Occasionally, clients decide that they want to make changes in the design or the amount of decking to be poured. Please give this matter very careful consideration because it is very hard to add decking later

which matches the original deck in texture and color. And please make your desires known well in advance so the changes can be made, and the proper amount of material can be brought to do the job completely.

PLEASE DO NOT WALK ON OR WATER THE NEW DECKING FOR AT LEAST 24 HOURS!

13. LANDSCAPING

While it is not always possible to do so, when it can be done, it is always advisable to install Landscaping before finishing (Plastering) your pool. This is because the mess and fertilizers used in Landscaping can be very harmful to the pool water and may discolor or permanently stain new Plaster. If we are not installing landscape, we often work with other landscape companies, we will be happy to coordinate this vitally important phase with you if we are not your selected landscaper.

Although Landscape installation occurs late in the construction schedule, it is important that you start planning for it very early—preferably in the pool planning stage. This will help with construction workflow and save time & money by not receiving change order fees through this process.

14.FENCING

Now it is time to replace or build fences. Generally, local Safety Codes require fences between five and six feet in height, of a non-climbable material with self-closing, self-latching gates. We will discuss fencing requirements, which pertain to you well in advance. Since fences and gates must be inspected and approved before Plaster can be scheduled, please don't delay in arranging for them.

NOTE: 4th Payment up to 95% of contract total plus any change orders & additions.

15. PLASTER

Plaster is the final stage of construction for your new pool. When it is installed, your pool is "substantially complete." Plaster is a smooth waterproof material, which coats the interior surface of your new pool. The Plaster Crew will install the interior fittings such as the Main Drain, umbrellas sleeves. It usually takes about one day to install the Plaster.

When they are through, the Plaster Crew will wrap the end of your garden hose with a rag, and leave the hose turned on, resting in the deep end of your pool. Once you have started filling your pool, please follow these important guidelines:

1. DO NOT, UNDER ANY CIRCUMSTANCES, STOP THE WATER UNTIL IT REACHES HALFWAY UP ON THE TILE! This is critical! If the water is stopped, there is a high risk that the fresh plaster will develop a permanent stain or ring at the water line. Or the remaining exposed area could dry out and develop checks or cracks.

2. Try to protect your new pool from dust, dirt, and leaves while it is filling. **BUT DO NOT GO INTO THE POOL TO REMOVE DEBRIS!** You may use a FINE MIST SPRAY to hose down dust or dirt into the pool water.

3. Please do not turn on any switches or try to operate the pool pump or light. We will turn on the equipment after the pool is full. Any attempt to operate any of the equipment before the pool is full and before we have properly prepared it could lead to electrical shorts or serious equipment damage.

4. CALL US when the water reaches halfway up the tile. We will schedule a prompt visit to complete detail work and perform the Start-up (Step 16).

Your new plaster will start to hydrate immediately after mixing and application, with most of the hydration taking place within the first 28 days. This is a critical period with new plaster, plaster finish is most susceptible to staining, scaling, and discoloration. Your new pool plaster will need to be brushed 1-2 times daily this is recommended by the "National Plasters Council" for a 28-day period, during this period your pool water cannot be heated nor should salt be added. **NOTE: brooming process is the homeowner's responsibility.**

Customer has signed the White and Colored Pool Interior Finish Agreement.

Customer Initials _____

16. SYSTEM START-UP

After your new pool has filled with water (it usually takes about a day and a half or two days to fill), we will set an appointment to clean out the minor construction debris, inspect all operating pool systems, and turn on the pumping and filtration system. We will check everything to be sure it works properly.

And we will also spend time with you to be sure you understand how to operate and maintain your new pool. Normally, the instruction session takes about one hour, although we could spend more time if necessary. Please try to be sure that all the members of the family who will be working on the pool can be present to receive the operating instructions.

During Start-up, we will put in the initial chemicals, which will help keep your water clean, clear, and sparkling. You will also receive the cleaning and maintenance tools you need to take care of your pool.

NOTE: When your pool has been started up, your Final Payment is due.

17. WARRANTY AND CONTINUING SERVICE

Upon receipt of your Final Payment and all Change Orders, your Pentair Warranties become effective. Each item of equipment carries the Manufacturer's Limited Warranty, and the pool shell comes with the Warranty outlined in our original Contract.

NOTE: It is the homeowner's responsibility to register Pentair pool equipment at www.pentair.com under pool product warranty information.

In a project of this complexity, it is normal to need minor adjustments and or repairs. Don't worry! We will do all we can to work through them quickly.

18. CONTINUING SERVICE

Don't forget that after the pool construction is complete, we're still here to back you up! We won't see each other as often, but you're still a Very Important Client to us! Keep in touch for any Warranty work—and remember us for any additional work you might want to do. If we can't do it ourselves, we can probably introduce you to a qualified craftsman whom we have worked with and whose work we endorse.

Our business is SERVICE—for YOU! Let us know how we can serve you.

19. ENJOY

Sit back and enjoy your own little slice of paradise.

Estimate # _____

Customer Signature: _____

Date: _____

Kokopelli Representative: _____

Date: _____