

HOW TO depave



The Guide to Freeing Your Soil



A PARKING LOTS TO PARADISE PRODUCTION

Authors

Hindi Iserhott
Maren Murphy
Maia Nativ
Eric Rosewall

Photography

Eric Rosewall
others where noted

Design

Maggie Gardner
Eric Rosewall

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Depave: P. O. Box 12503, Portland, OR 97212 | info@depave.org



WELCOME

There are a lot of things you can do to transform an over-paved place in your neighborhood into a greener and healthier space. We hope to inspire you with this guide that explains the process of depaving and the possibilities for regreening.

Depave promotes the removal of unnecessary pavement from urban areas to create community green spaces and mitigate stormwater runoff. Through community partnerships and volunteer engagement, Depave strives to overcome the social and environmental impacts of pavement with the use of action-oriented educational events, community stewardship, and advocacy to reconnect people with nature and inspire others. Depave is a nonprofit organization based in Portland, Oregon.

Why Depave?

Paved surfaces contribute to stormwater pollution, whereby rainwater carries toxic urban pollutants to local streams and rivers, greatly degrading water quality and riparian habitats. Pavement also disconnects us from our natural world. The solution is clear; the removal of impervious pavements will reduce stormwater pollution and increase the amount of land available for habitat restoration, urban farming, trees, native vegetation, and beauty, thus providing us with greater connections to the natural world.

We are here to help and support you in your depaving endeavor! This is a big job and before you undertake such a project it is best you know what you are getting yourself into. There are many aspects that need to be considered and this guide was created to walk you through all the necessary steps and act as a resource to share our knowledge with others and help empower more people to do depavings of their own. Please let us know if you have additional information, questions, ideas, or resources that should be added to this guide.

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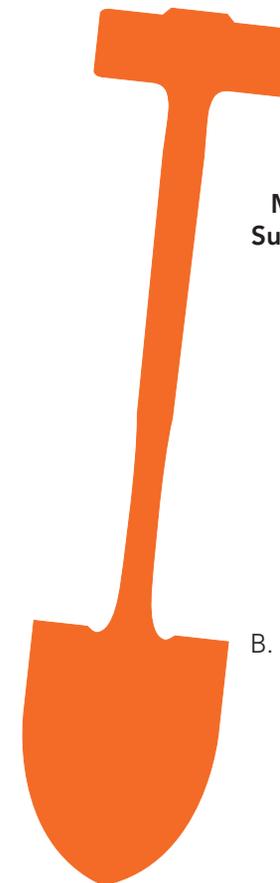
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PLANNING

You have a site, and have decided you want to depave it. Before you begin tearing things apart, it is important to have a plan for what you want to put in its place.

One of the factors to consider is how water interacts with the site. Walk around your site to do some critical observation and ask yourself a few questions. Closely examine your site and evaluate drainage in and on the perimeter of the potential depave site. How will drainage be handled onto or across the newly-depaved site? Are there downspouts from adjacent buildings? Do the downspouts go into underground pipes? Or do they drain to the pavement? If the latter, where will this water go or concentrate after the depaving? Consider opportunities to disconnect downspouts from sewer lines and utilize the newly-depaved area for on-site infiltration using bio-swales or other low-tech approaches.

Contact your local city or county for guidance on stormwater retrofit information and design. How will removing this section of pavement affect the adjacent sections? Are there drains currently on site that connect to a dry well or to the sewer system? After you have explored managing the water that will fall on the site, then you'll think about what you will use the site for once the pavement is removed. It will be helpful to create a site plan to record your ideas.

For a first time depaving project, we highly recommend starting small, 500 square feet or less. Once the site has been selected, discuss depaving with the property owner and get written approval for the project. Next, research the history of your site and test your soil. Then, create a vision for the future greenspace and depict it in a site plan.

Check out Appendix C for the full Depaving Checklist



SITE HISTORY & SOIL HEALTH

Soil condition may influence your post-depaving plans, so it is important to take the time to research this prior to depaving.

Knowing the history of your site can help determine the condition of the soil underneath the pavement. A good place to start is at your local library or assessor's office with Sanborn Maps. Land deeds are also helpful to acquire information about previous landowners and land uses. For Portland residents, Portland Maps Online - through the City of Portland - is a useful resource. Most cities have similar online mapping resources available.

Lead is the most commonly found dangerous contaminant in urban soils. The number one source of lead contamination is lead paint, from older construction and older houses. Scraping and sanding paint, or chipping and flaking of paint, is the source of soil contamination in the home environment.

TESTING SOIL

Depave discourages community members from removing pavement that is covering contaminated soil. If contamination is currently present in the soil, the contamination is capped and is not causing any severe negative environmental or health impacts. Unless there is a cleanup plan in place, removing the pavement may do more harm than good. Therefore, Depave strongly recommends testing the soil under the pavement before any pavement is removed.



What to test for?

If the post-depave plan does not include growing food, Depave recommends testing for: lead, cadmium, hydrocarbons, and arsenic. If the post-depave plan includes growing food, Depave recommends also testing for organochlorine pesticides.

Refer to Appendix A for our soil testing procedure and how to understand the results of your soil test.

SOIL INFILTRATION TEST

An infiltration test will help determine if the soil on the property is suitable for certain types of stormwater management systems, such as a rain garden or dry well. This test measures how quickly water can soak in and flow through the soil. With a few simple materials, this test can be easily performed.

Refer to Appendix B for detailed step-by-step instructions on how to perform an infiltration test.

SITE DEVELOPMENT IDEAS

Once you have a good idea of the site conditions, you can begin to explore the possibilities for improvement. A well executed depaving can help revitalize a neighborhood space with features that can: manage stormwater, provide habitat diversity for urban wildlife, reduce the urban heat island effect, and/or provide garden space for community members. Whether for stormwater, playing, farming, or wildlife, planning for the end uses of your site will hone your vision and help you develop a site plan to implement your project.

STORMWATER MANAGEMENT

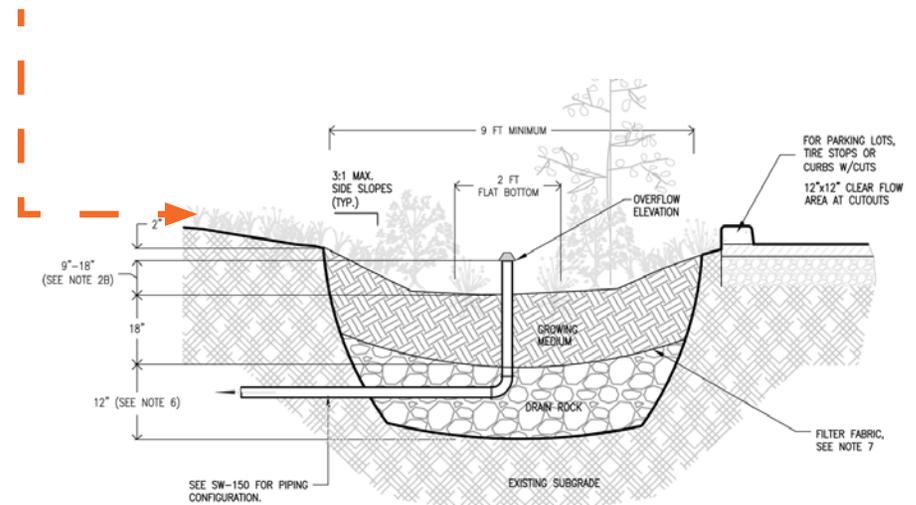
One of the major benefits of depaving is mitigating stormwater runoff through the removal of impervious surfaces. Depaving is one of the best ways to reduce stormwater runoff coming from buildings and parking lots. Once depaved, there are a number of methods to help stormwater infiltrate into the soil, keeping contamination out of our rivers and streams and helping to keep nutrients in the soils on site. The most common stormwater management devices are bioswales and rain gardens, which require minimal infrastructure.

Some cities provide financial incentives for on-site stormwater management. The Clean River Rewards Program in Portland offers ratepayers a maximum discount of 100% on the on-site stormwater charge. Check with your local stormwater management agency to see if your city has an incentive program.

Most cities have a stormwater management manual with detailed descriptions and images of stormwater facilities.

VEGETATED BIOSWALES

Bioswales are gently sloping depressions planted with water-loving native plants and grasses that treat stormwater runoff from rooftops, streets, and parking lots. As the runoff flows along the length of the swale, the vegetation slows it and allows it to infiltrate into the ground while sediments and other pollutants settle out. There are many design and planting options for a swale and they can often look like a typical landscaped area. Swales can be planted with a variety of trees, shrubs, grasses, and ground covers. Native plants that tolerate both wet and dry soil conditions are best. Bioswales are cost-effective — typically costing less than a standard piped drainage system — are attractive and can provide wildlife habitat and visual enhancements.



RAIN GARDENS

Rain gardens, or vegetated infiltration basins, are landscaped depressions that are either excavated or created with bermed side slopes. Stormwater runoff is deposited into the basin from an inlet pipe or from a sloped impervious surface (parking lot) where it is temporarily stored until it infiltrates into the ground. Like bioswales, rain gardens can be planted with a variety of trees, shrubs, grasses, and ground covers. Similar to other gardens, rain gardens are likely to need watering and weed pulling during the first one to three years, but with proper construction and maintenance, a rain garden can last indefinitely. Many conservation districts and environmental organizations offer information about and classes on how to create rain gardens. Seek out these types of groups in your area for assistance with managing stormwater on your property.



Bioswale



Rain Garden
Lake Oswego United Church of Christ

PLANTERS

There are a variety of planters that can be created post-depaving to beautify the site and reduce stormwater runoff: infiltration planters, contained planters and flow-through planters.

Infiltration planters are structures or containers with open bottoms to allow stormwater to slowly infiltrate into the ground. They contain a layer of gravel, a layer of soil, and a layer of vegetation. Infiltration planters are not recommended for soils that do not drain well, like clay soils.

Contained planters, are structures filled with soil and plants and collect precipitation only, not stormwater runoff from another source. Contained planter boxes are placed above ground and can be prefabricated pots or constructed in place.

Flow through planters are structural landscaped reservoirs with impervious bottoms or those that are placed on impervious surfaces. These planters are filled with gravel, soil, and vegetation and are typically waterproofed. They temporarily store stormwater runoff on top of the soil and filter sediment and pollutants as water slowly infiltrates down through the planter. Excess water collects in a perforated pipe at the bottom of the planter and drains to a destination point.

All three types of planters mentioned on the previous page come in all shapes and sizes, are made of stone, concrete, brick, plastic lumber, or wood, and can hold a variety of plants. The cost of planters depends on the size and type of material used, but generally planters are less expensive than more conventional stormwater management facilities.

Additional stormwater management devices include:

- Rain cisterns for collecting roof runoff
- Soakage trenches placed under any ground-level porous surface such as yards and landscaped areas
- Drywells, which are underground structures that dispose of stormwater runoff by dissipating it into the ground, where it merges with the local ground water

TREES & NATURESCAPING

Adding trees to your landscape is easy, attractive, and provides many stormwater benefits. Trees hold rainfall in their leaves and branches, slowing flow and decreasing stormwater runoff volume by 35% or more during small storm events. Generally speaking, evergreen trees will capture more rainwater in winter months than deciduous trees.

Another option for post-depaving is to restore the habitat by naturescaping with native plants that support your region's native wildlife and plants. Native plants are adapted to local climates, are naturally resistant to native pests and diseases, and require less maintenance and water than non-natives. [Check out some great tree & naturescaping groups online: www.depave.org/resources](http://www.depave.org/resources)



Rain Garden



Flow Through Planter



LEARNING GARDENS

Depave has worked closely with public and private schools to remove asphalt from school playgrounds in order to create learning gardens. Outdoor learning gardens provide plots for teachers and students to grow food and plants in an educational setting. Most schools across America have a high presence of pavement on their property, originally designed to reduce maintenance costs for school districts. As the world becomes more urbanized and children have less access to nature, Depave encourages schools to rethink their function in the lives of students and their families. School gardens can facilitate environmental education and hands-on learning that is both engaging and empowering. Positive change starts with our children, and schools offer one of the best environments to accomplish this.



Community Garden

FOOD GARDENS

One of the most common uses of newly depaved spaces is community food gardens and orchards. Raised beds are a good solution for soils with low permeability or if there is any possible soil contamination. If you are working with a large site, a community garden with individual garden plots is a great way to provide garden space for many people and bring the neighborhood together.



Turf Block

Outdoor learning gardens provide places for teachers and students to experience firsthand growing food and caring for a garden.



School Garden

PAVEMENT ALTERNATIVES

Still need to park a car, but want to reduce stormwater runoff? **Pervious pavement** and **turf block** are good ways to provide some of the benefits of depaving while also providing the structural support needed for more intensive uses. Installing these materials requires technical expertise, so contact a local paving or landscaping contractor for help.

CREATING A PLAN



A site plan is a detailed drawing of the site including what changes are being proposed. A detailed site plan is required in order to get a permit from the City. If a permit is not required for the project, the plan will still be very helpful in helping determine what materials will be needed to complete the project, the budget, and how it will look when the project is complete.

Your site plan should clearly depict where you propose to depave, a scale, a north arrow, elevation points and water flow across the site, stormwater drains, important project notes, and existing and proposed structures and trees. These drawings do not need to be polished documents, but do need to be drawn to scale and thoroughly detail the elements of your proposal. When working within a community there is often a design professional who can help create a plan. For this reason, and many others, we highly recommend reaching out to the community to collaboratively create a vision — depicted in your site plan — for the future greenspace.

Other drawings, such as sections through the area and a planting plan/list can also help you define your project. Creating a **plant list** based on the site plan will help determine how many plants are needed and guide your budget and your landscaping efforts. A plant list should at least contain the common and botanical name, quantities, and the size (of the container) you plan to purchase.

CITY PERMITS FOR YOUR PROJECT

Each city has a different set of codes and the permitting process may be simple or complicated, depending on the elements of your plan.

Projects that involve excavation of large areas or treatment of stormwater on site with a rain garden may take longer to permit than projects that simply involve replacing pavement with garden space.

If the pavement you want to remove is in the public right-of-way, you may need permission from your city's transportation department. If the land you want to depave is currently considered to be a parking lot, you may also need to get permission from the city and address any requirements relating to current parking codes. A certain amount of off-street parking is typically required for many commercial and residential properties. Inquire with your city's development agency to clarify if your proposed project requires a permit.

PERMITTING IN PORTLAND

For projects completed on private property, a permit may not be required if the affected area is fairly small.

Larger projects often require these documents for permitting:

- a site plan, a section, and a plant list
- a site development permit
- an erosion control agreement
- proof of an infiltration test (for stormwater elements)
- a stormwater facility maintenance agreement

Call or visit the Bureau of Development Services to determine if you need a permit. **Be prepared** with your site plan in order to clearly convey the ideas of your proposal.

Find more on permitting in Portland: www.depave.org/resources

SURFACE MATERIAL

SURFACE TYPE

Before you get started, the impervious surface needs to be broken down into smaller pieces that can be physically lifted. This can be done either using a diamond-blade saw or a jackhammer. A few questions need to be answered in order to determine which one is right for the project:

- What is the surface material?
- How big is the area to be removed?
- Does the depaving border an area that needs to be preserved?

CONCRETE - REUSE IT!

Concrete is harder and more durable than asphalt, so depaving large areas of concrete (larger than a driveway or patio) by hand will be too difficult. This “urbanite” can be reused to construct walkways, flower beds, fire pits, retaining walls, and other outdoor structures. If you or your neighbors can’t use your debris, you can post them online and will likely find a taker. Reduce, reuse, recycle!

ASPHALT - RECYCLE IT!

Asphalt is softer and lighter than concrete and is not suitable for reuse as a long-lived building material. Depaving vast areas of asphalt can easily be accomplished by hand. It is readily recycled by local pavement processing companies into a crushed rock aggregate used in construction projects. In order to ensure the asphalt gets recycled, it is best to keep materials separate; one dumpster for asphalt, and one for gravel and other debris.



CALL BEFORE YOU DIG

The national ‘call before you dig’ number is 811. This free service alerts the utility companies to come out and mark your property showing where the water, electric, gas, and any cable lines are buried. Within two business days someone will be sent to tag the street and property. **Red is for electricity, cables, and conduit, yellow means gas, oil, or petroleum, orange signifies communication, alarm or signal lines, blue and purple indicate water lines, and green shows sewers and drain lines.** A yellow line across your proposed work site can be dangerous so be careful!!! Gas leaks are no fun.

BEFORE DEPAVING

PREPARING ASPHALT WITH A SAW

Cutting asphalt up into a grid is the best way to prepare large surfaces for hand removal with pry bars. A diamond-blade walk-behind saw is used to create a straight perimeter bordering an area of pavement that is going to be preserved, or for large areas that will be removed by hand. These saws work well for cutting straight lines, and are also great for cutting tree wells or any work done in the public right-of-way in which some of the pavement remains and a neat clean line between the two areas is desired.

The saw and diamond blade can be rented from a local equipment rental store. An open bed truck or a trailer is needed to transport the saw to and from the site. A hose and outdoor water spigot will be needed to cool the blade while running the saw.



David Osborn



BREAKING UP CONCRETE WITH A JACKHAMMER

A saw and a pry bar just won't cut it with concrete; you'll need a jackhammer!

This tool is inexpensive to rent and simple to use. The chisel and point bits are best for concrete. When using the jackhammer, positioning is key. Your job is to keep it from falling over, and angling it when it needs to be angled. First create cracks with the point bit, and then "explore" the cracks using the chisel bit to make them bigger. This is all easier if the concrete has room to move (i.e. break), so work from the edges toward the center. If you encounter rebar, it might be best to call in a professional to remove it, as steel-reinforced concrete is very strong.

ORDER A DROP BOX

Contact a local garbage hauler to get a 10-yard drop box delivered to your project site before you start depaving. Make sure the box is as close as possible without being in the way and that the doors are facing toward the removal area (marked out with paint). A standard 10-yard drop box can accommodate about 400-600 square feet of asphalt.

HAND TOOLS

PRY BAR

A pry bar is a long steel bar that works extremely well for prying up pieces of asphalt and concrete. **The pry bar is the best depaving tool!** Use it in conjunction with a smaller piece of asphalt placed underneath the bar next to a crack — like a seesaw — to leverage pieces out of the ground and reduce the strength needed to pry up pavement. Pry bars can be purchased at most hardware stores.

PICKAXE

Pickaxes can be useful to pry up the chunks of concrete or asphalt. They usually have one sharp pointed end and one flat end. Use extreme caution when swinging these and always make sure no one is standing behind you.

SLEDGEHAMMER

Sledgehammers can be used to help break up big pieces of asphalt. If the saw blade didn't quite cut all the way through the asphalt, a sledgehammer will really help to make that last crack. As with the pickaxe, use extreme caution when using a sledgehammer and always double check to make sure there is no one behind you.

SAFETY

Gloves and closed toed shoes are a must when depaving. Eye & ear protection, a dust mask, and long pants are highly recommended.



WHEELBARROW

Construction-grade wheelbarrows are used to transport the broken up asphalt or concrete to the drop box. When working on a large area, it is best to work from back to front in order to make sure the wheel barrow has a clear hard surface to roll on. Don't forget a ramp, so you can get your wheelbarrow into the drop box — a long 2' x 10' board or something even larger will be really helpful.

HAND TRUCK

Hand trucks can be used to transport overly heavy blocks of material. Using a wide metal or wood ramp, the hand truck can be wheeled directly into the drop box for easy unloading of asphalt blocks.

DEPAVING

TECHNIQUE

Now is the time to get the material off the ground and into a drop box to be hauled away or into a pile to be reused.

If the area was cut into squares using a saw, it is best to start with either a pickaxe or a pry bar. It is helpful when cutting the asphalt if you cut and remove several small triangles at the corners of a few squares to provide easy places to start prying. Starting at a corner of one of the squares, use a pry bar to pick away at a corner until the tool can get slightly under the slab. Once one end of the bar is under the surface, push the other end all the way down until the square starts to come up. Have a friend stick another bar in under the same square and do the same. Both bars working together should be enough to get the heavy chunk off the ground.

Once the asphalt square is separated from the others, at least two people will be needed to lift the block into a wheelbarrow. Wheeling a wheelbarrow full of asphalt can be very heavy and it can easily tip over, so be careful not to overfill it.

From the wheelbarrow, the asphalt will need to be placed in a drop box. There are two ways to get the asphalt into the drop box:

1. Ramp it. You can either use a big piece of plywood or you can rent a metal ramp at any local tool rental location.
2. Throw it. Carefully toss smaller pieces over the edge.



EVENT CONSIDERATIONS

Make the transformation of your space, however big or small, a celebration! **Promote** your event through the community, on and offline, well in advance to ensure you get a good crew of helpers. Provide **food and refreshments** to keep volunteers fueled — depaving is a hard day's work. Make sure there is an area to take a load off in the **shade**. Take the time to make your event safe, as well as fun, by preparing leaders ahead of time with the right **safety** procedures, and provide volunteers with gloves, safety glasses, and dust masks. Add in other **festivities and music** to polish off your depaving — try hosting your event alongside other neighborhood activities to add more life to your event.

POST DEPAVING

SUBSURFACE

Beneath the pavement, there is typically about four to six inches of gravel. There are a number of ways to remove the gravel in order to get to the soil.

1. With small sites, the gravel can easily be shoveled out of the newly depaved area. Gravel can be reused to create walkways through gardens, filling potholes, create drainage areas, etc.
2. For larger sites, the gravel can be removed using heavy machinery. You can hire a local contractor to do this work, or rent a small backhoe or bobcat from a heavy equipment facility and do it yourself. If kept separate from other materials, gravel can also be hauled away in a dropbox and recycled at a local reuse facility.

SOIL RESTORATION

The biggest problem caused by heavy impervious surfaces is soil compaction. The weight of the pavement crushes macropores - the small spaces between the soil aggregate - preventing water, air, and roots from moving through the soil.

For small sites, a spading fork or a pickaxe should be sufficient to break up the compacted soil enough to begin amending it. Machinery with deep-reaching attachments will be more efficient in breaking apart compacted soil at larger sites. After the soil is broken up and aerated, mixing in compost or a blended soil mix will help create a healthier soil profile.



LANDSCAPING

Now for the fun part! Using your site plan and planting plan as a guide, your team can begin to bring the site to life. While depaving is a great summer activity, plants shouldn't go into the ground until fall, when the temperature is cooler. Determine the best time of year to begin planting in your area to ensure the highest possible survival rate for the plants. Organize volunteer work parties to space out the work over several days and many hands.

APPENDIX A - TESTING SOIL

SUPPLY CHECK LIST

- **Hand held concrete saw or core drill.** We recommend using a hand held, gas powered concrete saw. Although using a core drill will create a cleaner sample hole, it is much more time consuming.
- **Water source and hose** for operating the concrete saw.
- **Safety Gear** – safety glasses, ear protection, work gloves, long pants, and protective shoes.
- **Digging & Sampling Tools** – You'll need tools that can work in tight spaces to dig out core debris, fish out rocks and gravel, and eventually get to the soil to pull out viable samples. Use at least one larger tool, such as a thin garden spade or a hori hori knife, in order to get out major scoops. An old butter knife and table spoon also work as well.
- **Sample Jars** – These are needed when collecting a soil sample. Ideally, these jars should be cleaned to laboratory grade standards (rather than just dishwasher at home). The soil testing company should provide jars.
- **Cooler** – A cooler is the best way to store and transport a soil sample. Heat can break down certain pollutants that can be found in soil, thereby compromising the integrity of the sample.

SOIL SAMPLING INSTRUCTIONS

The first step in testing your soil is to contact a soil testing lab that will take and test the soil samples. Next, holes will need to be cut in the asphalt in order to expose the soil.

Cutting (with hand held concrete saw) – Ensure the saw is running with the water fully connected. Turn on the saw and then slowly drop the spinning blade onto first hole location. Do not press hard on the saw as it starts to grind into the paved surface. Let the saw blade do the work. After a while, you may feel the blade passing through into a different strata (possibly bumpy if it is a stone layer, or smoother if it is straight into soil). In the same manner, make two more cuts to form a triangle. Using a digging tool, carefully remove the asphalt triangle and fish out pavement debris and any stones that might be found in the subgrade beneath the paved layer.

Sampling - Using a clean spoon or other small implement, collect a soil sample. Use laboratory grade jars when possible. Once the sample is collected (4 ounces is the recommended minimum), seal jar lid and place in an iced cooler (ideal) or shaded area. We recommend taking samples from three locations on the property and mixing the samples to create a composite sample.

Clean Up – Replace pavement triangles back in holes, and fill remainder of holes in with gravel or sand. Tamp down with foot — do your best to eliminate a tripping hazard. Give the area a quick broom sweep to clear any remaining debris. Seal large cut lines with an epoxy filler for a seamless patch.

Send in sample – The soil testing company will tell you the best way to return the samples to them. One to two weeks after they receive your sample, they will send you the results.

According to the Department of Environmental Quality, urban residential maximum levels are:
Lead: 400 ppm, Cadmium: 78 ppm, Arsenic: 1 ppm

These are the maximum levels for urban residential soils. This does not mean that it is safe to grow edible plants in these soils. This safety limit is based on the typical exposure to contaminants in a home setting.

APPENDIX B - INFILTRATION

PERFORMING AN OPEN PIT INFILTRATION TEST

For projects that include a stormwater facility, like a rain garden, an infiltration test should be performed as soon as possible in the project process.

In order to establish the rate at which rainwater will soak into the soil underneath the pavement, you'll need to dig down to the native soil as close to the area that you will be depaving. This test can take up to three hours, following the steps below, and will be useful should you need to acquire a permit for the project.

1. Dig a hole to the depth of the bottom of the proposed facility - typically about 18 to 24 inches. A post hole digger is the best tool for this job. You will also need a measuring stick or tape measure. If you encounter a layer that is too solid to dig through or that has standing water, try digging in another location.
2. Fill the hole with water to one half the maximum depth of the proposed facility, and record the exact depth of the water and the time. Check the water level at regular intervals (every 1 to 10 minutes depending on how fast the water soaks into the soil) for one hour or until all of the water has infiltrated. Record the distance the water has dropped in the time period.
3. Repeat this process two more times as close together as possible to accurately portray the soil's ability to infiltrate at different levels of saturation. The third test will give you the most accurate measurement of the soil's fully-saturated infiltration rate.

Depth of Evacuation: _____		
Test 1: _____	Test 2 : _____	Test 3 : _____
Date: _____	Date: _____	Date: _____
Time: _____	Time: _____	Time: _____
Initial water depth: _____	Initial water depth: _____	Initial water depth: _____
Final water depth: _____	Final water depth: _____	Final water depth: _____
Duration of test: _____	Duration of test: _____	Duration of test: _____
Infiltration rate: _____	Infiltration rate: _____	* Infiltration rate: _____

DIFFERENT METHODS

Many states and municipalities have issued their own guidelines on how to conduct an infiltration test. Check with authorities, universities, or others in your area for local guidance.

* The pit infiltration rate is the result of the third test.

$$\text{Pit Infiltration Rate} = \frac{\text{Initial Water Depth} - \text{Final Water Depth (inches)}}{\text{Duration of test (hours)}}$$

APPENDIX C - CHECK LIST

DEPAVING CHECK LIST

For a first time depaving project, we highly recommend starting small, 500 square feet or less. Once you've got a site in your sights, follow these steps to guide your project:

- Get Written Approval from the Property Owner
- Create a Team and Develop a Vision
- Research the History of Your Site
- Perform an Infiltration Test & Soil Testing
- Draw Up a Site Plan and a Planting Plan
- Make a Budget Based on Your Design
- Get Permits if Necessary
- Schedule Depaving Date & Organize Event
- Publicize Event, Find Volunteers & Donations
- Locate Utilities - Call Before You Dig
- Prepare the Surface - Outline the Area & Cut it Up
- Draw Up an Event Space Diagram & Order Drop Boxes
- Depave - Make it a Celebration & Take Photos!
- Remove Gravel & Excavate
- Amend Native Soil with Compost
- Earthwork & Landscaping
- Planting and Finishing Touches
- Put Up a Sign
- Site Stewardship & Maintenance

RESOURCES

Visit us online for resources in Portland and beyond on:

- Stormwater Facilities
- Funding Sources
- Permitting
- Site Preparation & Material Disposal
- Equipment Rental
- Permeable Paving
- Urban Ecology, Farming, & Naturescaping
- Driveway Depaving
- Depaving in Other Areas

Visit us: www.depave.org/resources

THE DEPAVE NETWORK

Want to learn about developing a depaving program of your own? We have many more in depth resources to help you do so. Find out about our consulting services and joining the Depave Network.

Visit us: www.depave.org/network

