



SOMERVILLE DEPAVING GUIDE

First, read over the depave.org “How to Depave” Brochure. This will give you great general understanding of what’s involved in de-paving. Once you have this understanding, we suggest the following steps:

A. Assess the site!

- Determine the scope of the project – is it just de-paving or will it include other site prep? What are your plans for the site after de-paving?
- Having someone on the evaluating team who is handy or has construction experience is helpful
- You will need a measuring tape and a breaker bar (a 4-5 foot long thick metal bar to pry up material)
- Take pictures and detailed notes!

Collecting the information you will need:

1. Measure the dimensions of area to be de-paved
2. Are there obstacles to be considered, such as proximity to house, tree roots to avoid, etc?
3. Consider impacts of de-paving, including changes in rainwater flow and impacts to neighbors. Will measures need to be taken to avoid negative impacts
4. Describe the type, depth and solidity of the material as well as possible. Is the site asphalt or concrete? Are there lots of cracks? Check the edges and pry a piece off in another area to see how consistent the depth is. This is necessary to determine how difficult it will be to de-pave, whether a concrete saw is needed to cut the site into squares and how much material will need to be disposed of.
 - Asphalt with cracks: try to pry it up/ break it up with hand tools.
 - Thick asphalt without cracks: rent a concrete saw and cut the site into pieces no larger than 2x2 feet.
 - Concrete with cracks: try to sledgehammer it working from the edge and clearing away debris as you go.
 - Concrete without cracks: rent a concrete saw or jackhammer.

If you don’t want the entire site de-paved, do you want a clean line at the edge? If so, you will need to rent a concrete saw.

Question: *Doesn't the asphalt near my house help prevent the water from getting into my basement?*

Answer: *No, asphalt prevents the water from absorbing into the ground creating a buffer against flooding. Soil and downspouts should be pitched away from the house to divert surface water.*

B. Waste disposal

Is there enough space for a dumpster or piles for waste materials? If you rent a dumpster, make sure you have enough space for it. The dumpster truck also needs enough room to unload/load the dumps, 30 - 40 feet in a line. Sample dumpster dimensions below, always measured in cubic yards.



Mark-One 781-863-0002,
<http://www.markoneinc.com/DumpsterDisposal.aspx>
Harvey 508-836-3000,
http://www.elharvey.com/waste_opencontainers.html

How to calculate how much dumpster capacity you need? An example is a 20 by 25 foot site with 3 inch thick asphalt.
 $20' \times 25' \times \frac{1}{4}' = 125$ cubic feet (3 inches = $\frac{1}{4}$ foot)
 $125/27 = 5.6$ cubic yards (27 cubic feet in a cubic yard)
You have to allow for extra space in a dumpster because you can never pack perfectly, so a 10 cubic yard dumpster is the smallest one you should get. Double check your estimate with the dumpster rental company to see if they think you have the right size.

If you are depaving a small area with less than 4 cubic yards, it may be more cost effective to hire a dump truck to pick up the material. The Somerville Journal usually has ads for many of these companies in their classified section. Some companies will help with loading the material.

Find out where the disposal company will take the material and make sure you are clear about the expectations on 'contamination.' For example, if you are disposing of concrete, they may not accept any rocks. If it's asphalt, they may want no dirt (other than what is stuck to the asphalt).

C. Estimate labor requirements

Labor requirements will depend on the size of the site, depth and solidity of asphalt or concrete, the distance to the dumpster or place where you will make your waste pile and, of course, how hard your friends work! Remember that you can't have too many people working in the same small space with tools, so you may need to stagger your volunteers over the course of the day. Assume that volunteers may not want to work more than a 2 hour shift.

- If concrete/asphalt cutting is needed, you will need two people to handle a saw or jackhammer. You can rent them at Taylor Rental on McGrath Highway outside of Union Square. Cutting/breaking should be done before volunteers arrive due to noise and safety, ideally at least a day.
- For guidance, it took approximately 30 person hours to pry up approximately 50 asphalt squares 2'x2' and 4 inches thick, breaking it and wheeling it into a nearby dumpster.
- On another site, it took 4 people less than one hour to remove an 8'x12' surface of cracked asphalt.

D. Secure the Volunteers

- Get confirmation of 50% more volunteers than you think you need, get them to sign up for specific time slots, if the project will last more than 2 hours
- Ask if they can bring their own work gloves, safety glasses and water bottles
- Get some experienced workers to be there at the beginning
- Have a couple of people overseeing the overall operations – not directing (these are volunteers!) but just making sure that things are running somewhat smoothly.
- Let them know they will have to sign a liability waiver to protect you. If volunteers are under 18, they will need written permission from their parent or guardian.
- Backup plans for bad weather --who will be

responsible for making the decision about the weather and how everyone will be notified

E. Assemble the Tools and Equipment

- You will need some combination of breaker bars, pick mattocks, wheelbarrows, sledgehammers, two wheeled hand trucks, and shovels. If friends loan their tools, they should label them!
- Make sure anyone loaning tools is aware that tools could be damaged, wheelbarrows and hand trucks, in particular.
- Assemble more tools than you think you'll need. Depending on your site, you may end up using more of one tool than another.
- Make sure you have extra work gloves and safety glasses for those who don't have them or forget them
- Get folding tables for food and a water dispenser, if needed.

F. Education

- Arrange to get posters of de-paving and water drainage from Lenni's website at <http://www.informmotion.biz/SCA.html>.
- Pick up copies of brochure or handouts, if applicable.
- Determine who is going to photograph or video the event
- Make enough copies of waiver forms for volunteers to sign before they work

G. On-site logistics

- Make sure everyone knows who is in charge of the work project.
- Have someone responsible for getting waiver forms signed.
- Have someone responsible for setting up food and water.
- Have someone responsible for discussing safety issues with using tools.
- Set up a debriefing process, if necessary.
- Have fun!

