

Volunteer

Professional

Volunteer + Professional

Rear Parking Partner

Image Source: Jean-Pol Grandmont, "Feuilles du Chêne écarlate - Quercus coccinea." 04 October 2008 via Wikimedia, CC BY-SA 3.0





The Rear Parking Partner can transform your lot into an amenity for responsible residential parking. This lot design provides a single parking space, though it can be enlarged to accommodate two vehicles. It is accessible from the alley and aligns with adjacent garages. The parking pad allows water to infiltrate the ground instead of running off into Detroit’s overtaxed sewerage system.

The design occupies only a small portion of the lot, allowing space for other landscape amenities and activities on the rest of your lot. This lot is a great design to share with a neighbor who also wants off-street parking!

For more information refer to [DFC-lots.com](https://dfc-lots.com)

What is the lot design likely to cost?

The estimated cost of the Rear Parking Partner is high (\$2,500 – \$5,500) and based on utilizing volunteer and professional labor. The Field Guide recommends hiring a professional for the earthwork and installation of the parking pad. Planting can be completed by a professional or by volunteers. The cost assumes that residents or volunteers have access to basic safety gear and garden tools.

How much upkeep will this lot design require?

This lot design requires a medium level of maintenance to thrive. Maintenance will include watering plants and newly planted trees, particularly during times of drought and excess heat, pruning trees and shrubs, and general upkeep of the parking area.

Will the installation of this lot design require a professional?

The installation of this lot design will require professional assistance for the first few steps. The Field Guide identifies volunteer opportunities if you, with the help and support of friends, family, or neighbors, would like to undertake the planting portion of this lot design. Please refer to the Step-By-Step section for guidance on professional and volunteer recommended steps. If you do not feel able to tackle the volunteer aspect of this lot design, a professional can construct the entire project.

How long will it take to install this lot design?

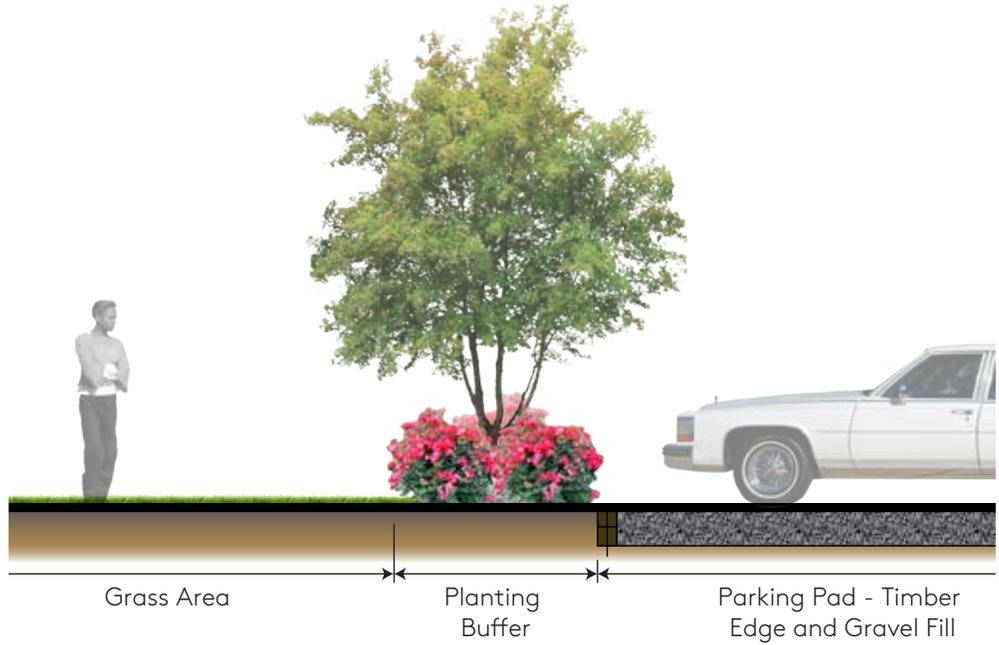
This lot design requires a professional for the completion of several steps. The projected installation time listed below only accounts for the volunteer opportunities listed in the Step-By-Step section. While people tackle projects differently, the Field Guide estimates the installation time of this lot design to be one to two full weekends with a volunteer group organized by a knowledgeable lot leader. The Field Guide recommends at least five healthy adults or youth to undertake this lot design. The Field Guide assumes that the lot is ‘construction ready,’ and all equipment and materials required for lot design have been acquired and are ready to use.

Cost	\$50 - 1,000	\$1,000 - 2,500	\$2,500 - 5,500	\$5,500 +
People	Volunteer	Professional	Volunteer + Professional	
Experience	Beginner	Intermediate	Advanced	
Upkeep	Low	Medium	High	
Stormwater	Good	Better	Best	
Location	Residential Lot in Full Sun to Part Sun (Near One or Two Residential Houses is Ideal)			

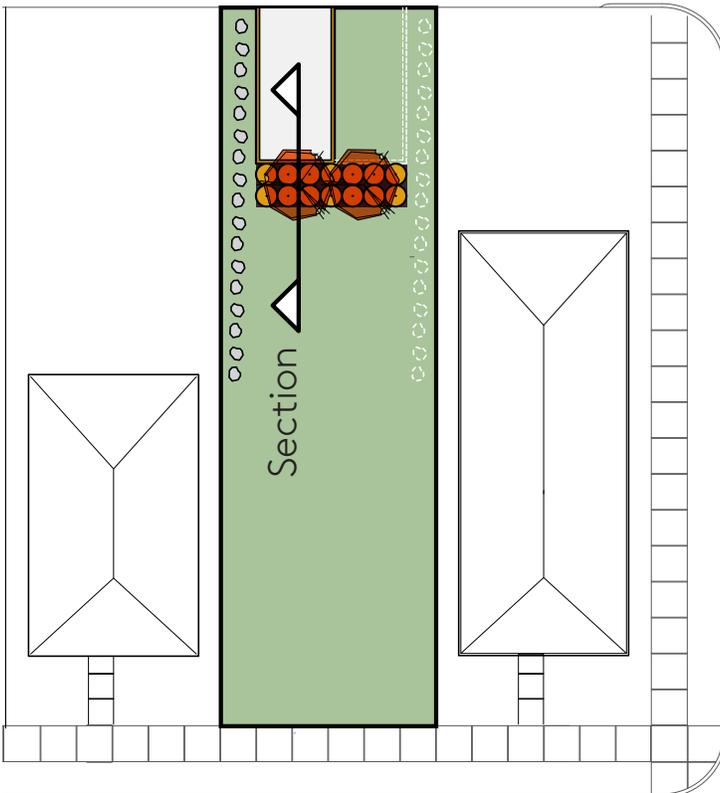
Rear Parking Partner

Example of Rose Hedge

Section



Where Do I Grow?



The Rear Parking Partner can be constructed on a single lot and can be utilized by one or two neighboring properties.

- Shrubs
- Trees
- Mulch
- Parking Pad
- Grass

Before You Start

'Construction Ready'

This lot design assumes that you have prepared the lot to a 'construction ready' state.

'Construction Ready' refers to a lot that is clean and clear of trash, hazardous objects, unwanted trees, brush and vegetation, fences, and other unwanted structures.

It may be necessary to remove grass in preparation for your lot design. Refer to the Remove Your Grass box located on the right hand side of this page for more information.

Is there an available water source near your lot? Consider how and where you will access water during and after construction to ensure that your plants can establish.

If your lot is not ready for construction, refer to the [Clean + Green](#) lot design.

You can find the lot design at DFC-lots.com.

Call Before You Dig

Locate underground utilities before beginning your lot design. MISS DIG provides a free service to Michigan residents by locating and marking utilities on requested properties. Call (800) 482-7171 or 811 at least three days before you plan to start digging on your lot.

Test Your Soil

Harmful pollutants have made their way into many urban soils. To proceed with awareness, consider having your soil tested before construction. Two great options are available:

Soil testing is free to members of Keep Growing Detroit's Garden Resource Program. Call (313) 757-2635 for more information or visit detroitagriculture.net.

If you are not yet a member, you can work directly with Michigan State University's (MSU) Extension Program. They have a Home Lawn and Garden Soil Test Mailer for \$25. For more information call (888) 678-3464 or visit msusoiltest.com.

If you are concerned about the presence of lead or other contaminants in your soil, call the Michigan Department of Health and Human Services at (866) 691-5323 or (800) 424-LEAD.

Remove Your Grass

Need to remove grass in areas where you are constructing your lot design?

There are many ways to remove unwanted grass. The first is to remove the grass and its root system by digging up the grass. Another option is to cover your lot with cardboard or a plastic tarp to smother your grass in darkness. It will take several weeks, but after being covered, the dead grass will be easier to remove.

Till Safely

Before you till, inspect your lot for signs of buried concrete or rubble that was not removed during the cleanup stage. Large debris can ruin tiller blades.

When tilling, wear appropriate safety gear, such as covered boots with socks, long pants, safety glasses, dust mask, and ear protection. Make sure you understand the safe operating procedures of your tiller. Refer to the user's manual.

What You Need: Shopping List

Shopping List

The shopping list provides a breakdown of potential materials, tools, and resources required to construct this lot design.

This shopping list is designed for a single lot (30 by 100 feet).

Tools + Resources

Suggested Tools

- Making Paint and Tape Measure
- **Safety Gear:** Gloves, heavy work boots, tall socks, pants, long sleeve shirts, dust masks, protective eye wear, ear plugs, and hard hats (if using heavy machinery)
- **Garden Tools:** Spades, shovels, rakes, trash bags, and wheelbarrows
- Drill, Power Saw, and Sledge Hammer

Potential Water Sources

- Garden Hose with potential extension hose
- Sprinkler
- Rain Barrel in addition to other water source

Field Guide Resources

Resources are available on the Field Guide's web site.

- Clean + Green
- Tree Planting Detail
- Perennials + Grasses Planting Detail
- Bulb Planting Detail

Materials List

Materials

- **Geo-fabric**, 220 square feet, 4 ounce non-woven
- **Timber Edging**, 14 boards, 8 feet by 8 inches by 8 inches pressure treated or cedar
- **Edging Stakes**, 32 stakes, ¾ inch by 18 inch round steel
- **Parking Pad Stone**, 8 cubic yards of MDOT 6A stone
- **Mulch or Wood Chips**, 3 cubic yards

Planting

- **Knockout Roses**, 14 pots or Balled & Burlapped
- **Amur Maple**, 2 pots or Balled & Burlapped

Remaining Lot (Optional)

Groundcover

- **Low-Maintenance Fescue Mix**, 12 pounds of seed
- **Germination Blanket**, 2 rolls (8 by 112.5 feet)

Rear Parking Partner Step-By-Step

Let's Start

Want to create the Rear Parking Partner? The Field Guide recommends hiring a professional for some tasks. Here are a few guiding principles to help you understand the tasks involved in the lot design and the steps appropriate for volunteers.

Check off tasks as you go along.

Lot Design Steps

Professional Recommended:

- Prepare Your Lot
- Create Parking Pad

Volunteer Opportunities:

- Plant Trees
- Plant Perennials
- Maintain Your Lot Design
- Sow Remaining Lot

Prepare Your Lot

The Rear Parking Partner is one of the more complex lot designs within the Field Guide. It is recommended that you hire a professional for these steps: Prepare Your Lot and Create Parking Pad.

If you decide to construct this lot design without the recommended assistance of a professional, the following guiding principles can help assist you with the installation of the lot design.

- This lot design utilizes back portion of the lot, 11 by 20 foot parking area with six by 21 feet planting bed.
- The Rear Parking Partner should be constructed as shown on the design plan to ensure the parking area and planting are the correct setback from adjacent lots.
- The parking pad should be minimum of five feet any from side property lines.
- Before you construct the Rear Parking Partner, make sure your lot and alley are clean and clear of obstacles and is safe for you to drive to and from your proposed parking area.
- Lot design creates extra soil, which must be hauled off site or disposed of. An alternative is to incorporate the extra soil into the front portion of your lot.
- Use marking paint and a tape measure to map out the size, shape, and dimensions of your parking area.

Rear Parking Partner Step-By-Step

○ Create Parking Pad

Follow these guiding principles for installation of the parking pad:

- The lot design shows a single parking pad; however, it can be extended to include two parking spaces. This lot design is for a single parking pad. **Excavate 11 by 20 foot area to a depth of one foot.** Remove all stones and roots to create a level area and compact soil.
- **Timber Edging:** You will need 14, 8 feet by 8 inches by 8 inches pressure treated or cedar boards. Set the bottom row of timber edging and level, then cut boards to fit. Timber edging will be required around all edges except along the alley edge.
- Pre-drill holes for round steel stakes, using two holes per timber for the bottom set of timber edging.
- Embed stakes into pre-drilled holes using a sledge hammer.
- Set second layer of timber edging on top of first row, staggering joints between top and bottom timbers.
- Cut boards to fit.
- Pre-drill holes through top timber edging, making sure to avoid the stakes already installed into bottom timbers.
- Embed stakes through both timber courses. You will need 32, ¾ inch by 18 inch round steel stakes for edging.
- **Parking Pad:** Place 4 ounce non-woven geofabric across pad area and up sides leaving six to nine inches lip (220 square feet).
- For a single parking pad, fill parking area with 12 inches of MDOT 6A stone (eight cubic yards). MDOT 6A Stone refers to stone sizes generally ⅔ of an inch to 1-½ inches in size.

○ Plant Trees

The Field Guide recommends planting 1.5 inch diameter trees; however, smaller or larger trees can be planted if preferred.

Trees can be purchased in pots or balled and burlapped. If you decide to plant larger trees, speak with a professional or an educational group as older trees can be more difficult to establish.

Plant trees as soon as possible after purchasing. If you cannot plant them the same day, do not leave unplanted trees in direct sunlight. Keep them in shade and well watered until you can plant them. (Trees dry out fast!)

Identify the location where you wish to plant the trees. Dig a hole three times the width of the root ball and equal to the depth.

Pots should be removed before placing the tree in the planting hole. Balled and burlapped root balls should remain wrapped until placed in hole. Unwrap the top ⅓ of the root ball and peel back the burlap once planted. Remove any twine, nails, or stakes. The root flare should be level with the ground when you place the tree in the hole.

Water the root ball, then backfill the hole with the soil previously removed from planting. Add water to the tree every six inches as you backfill the hole. Compact the soil lightly after each watering until the hole is filled with soil and level with the adjacent ground.

The Field Guide recommends three foot diameter by three inch depth of mulch or wood chips around trees. Keep mulch a few inches away from tree trunks.

For more guidance on tree planting refer to the [Tree Planting Detail](#).

Rear Parking Partner Step-By-Step

○ Plant Perennials

A sunny to partly sunny planting option is recommended for Rear Parking Partner. If your lot is in shade, seek alternative planting options.

Place plants in desired location, then remove plastic pots, loosen roots, and plant.

Place three inches of mulch or wood chips to 6 foot planting bed (3 cubic yards). Add mulch or wood chips to help suppress weeds.

For more guidance on planting perennials refer to the [Perennials + Grasses Planting Detail](#).

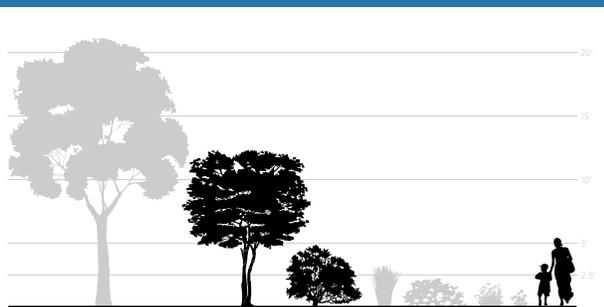
○ Maintain Your Lot Design

The parking area requires minimal maintenance; however, the plants will need care and maintenance to thrive and look their best. Water and weed plants regularly, especially during the first few years. Prune roses in late winter and maples in fall.



Visit the Resources page on the Field Guide's web site (DFC-lots.com) to discover other vendors and places to purchase plants.

Average Height of Plants



Small Trees and Shrubs

○ Sow Remaining Lot

If you are seeking a lower maintenance alternative to a traditional lawn, the Field Guide recommends a fescue seed mix. **If you follow the Rear Parking Partner lot design, you will need approximately 12 pounds of fescue seed mix for the remaining lot (1,500 square feet) and two 8 by 112.5 foot rolls of single net germination blankets.**

This family of floppy grasses is drought-resistant and requires one cutting (in August or September) per year. Fescue can be established in full sun to shade and should be seeded in spring (mid-March to mid-May) or fall (August to September).

Soil should be prepared for seeding by scarifying, raking, or tilling the soil four to six inches deep to loosen any compaction, allowing for easier seed germination and better water infiltration. Apply seed mix to a damp lot.

Sow seed across remaining lot by using a seed spreader or by hand. A seed rate of five pounds per 1,000 square feet is recommended. Gently water seedlings daily until they are four to six inches in height. Placing a thin layer of straw or a germination blanket over seeded areas will help ensure that your seed establishes by keeping seeds from blowing away and protecting them from birds. Germination blankets or straw can be purchased at most nurseries and garden stores.

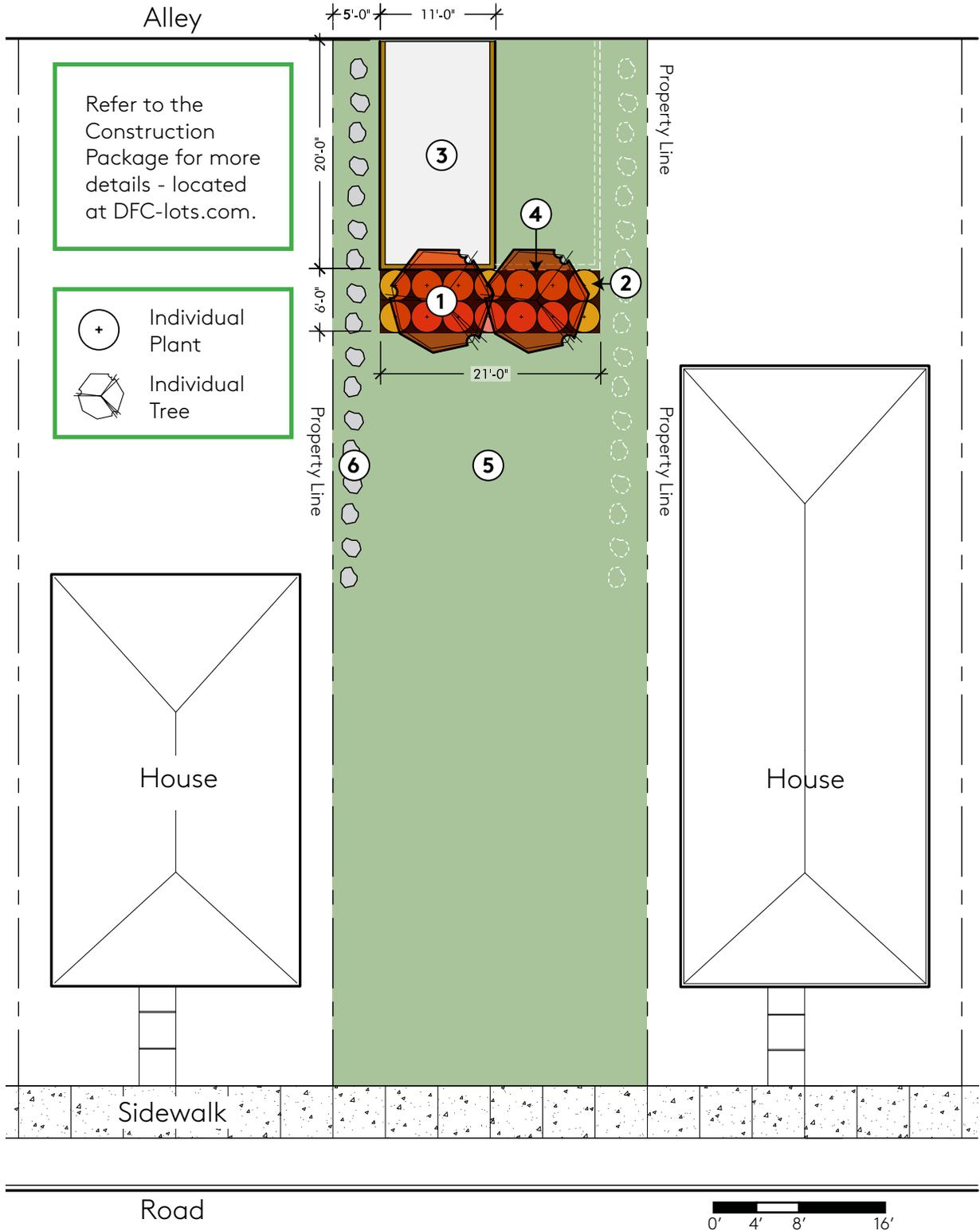
Once established, grass will not require supplemental watering except during unusually dry periods. Eco-Turf Low Maintenance Fescue Mix is one recommended seed mix and can be purchased through the Michigan Wildflower Farm.

Other Field Guide lot designs can be used as groundcovers. Check out the web site for additional options and ideas.

Next Level: If you would like to bring additional color to your grass, you can always plant bluebells, crocuses and/or daffodils to create a decorative show in spring. Bulbs should be planted in the fall.

For more guidance on bulb planting refer to the [Bulb Planting Detail](#).

Rear Parking Partner Lot Design



- | | | |
|--|-----------------------------|---|
| <p>1 Ornamental Tree (Amur Maple)</p> | <p>3 Parking Pad</p> | <p>5 Grass or Optional Groundcover</p> |
| <p>2 Flowering Hedge (Rose)</p> | <p>4 Mulch</p> | <p>6 Stone Path (Optional)</p> |

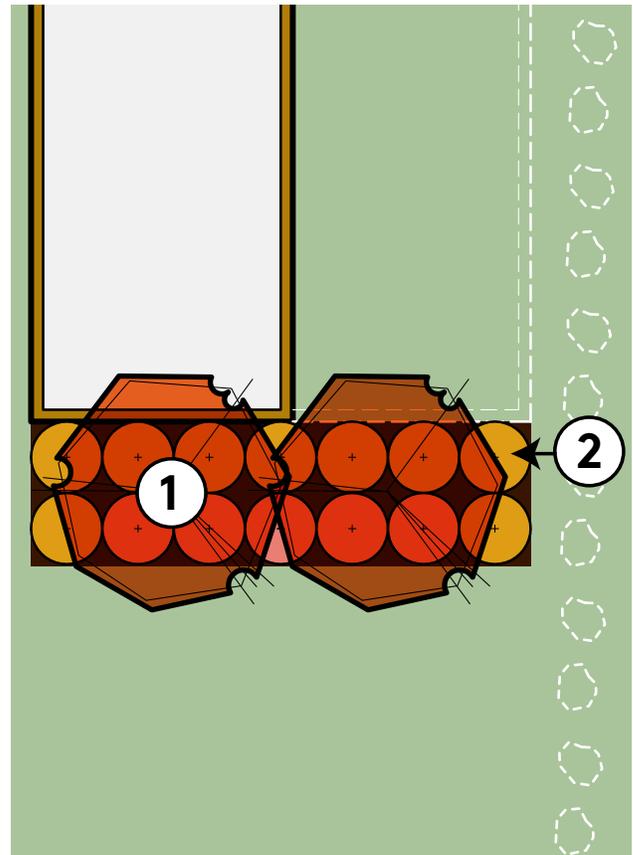
Planting Option: Full Sun to Part Sun



Amur Maple 'Flame'¹
Acer ginnala 'Flame'
 20' Height x 20' Width
Quantity: 2 pots or B & B



Knockout Rose²
Rosa 'Radtko'
 3' Height x 3' Width
Quantity: 14 pots



Plant Sizes



Pots: Roses can be purchased in one to five gallon pots. The size of pots can change based on availability.

1.5 inch diameter trees are available at commercial landscape supply stores in pots or balled and burlapped (B & B).

Key



Amur Maple
 (Space approximately nine feet apart.)



Knockout Rose Hedge
 (Space approximately three feet apart.)

Did You Know?

Professionals Can Help!

The Field Guide to Working With Lots provides a Construction Package for each lot design. The Construction Package includes information and details required for a professional to construct this design. On the Field Guide web site, use the [Construction Package](#) link located near the top of this lot design page to download and print. Your selected professional will then be able to provide a cost estimate and schedule based on the condition of your lot and the design you select.

Want to Hire Locally?

DFC-lots.com has a growing list of Detroit-based professionals and suppliers of landscape materials and services.

Still unsure of where to start?

Call (313) 294-LOTS or email fieldguide@detroitfuturecity.com for assistance.

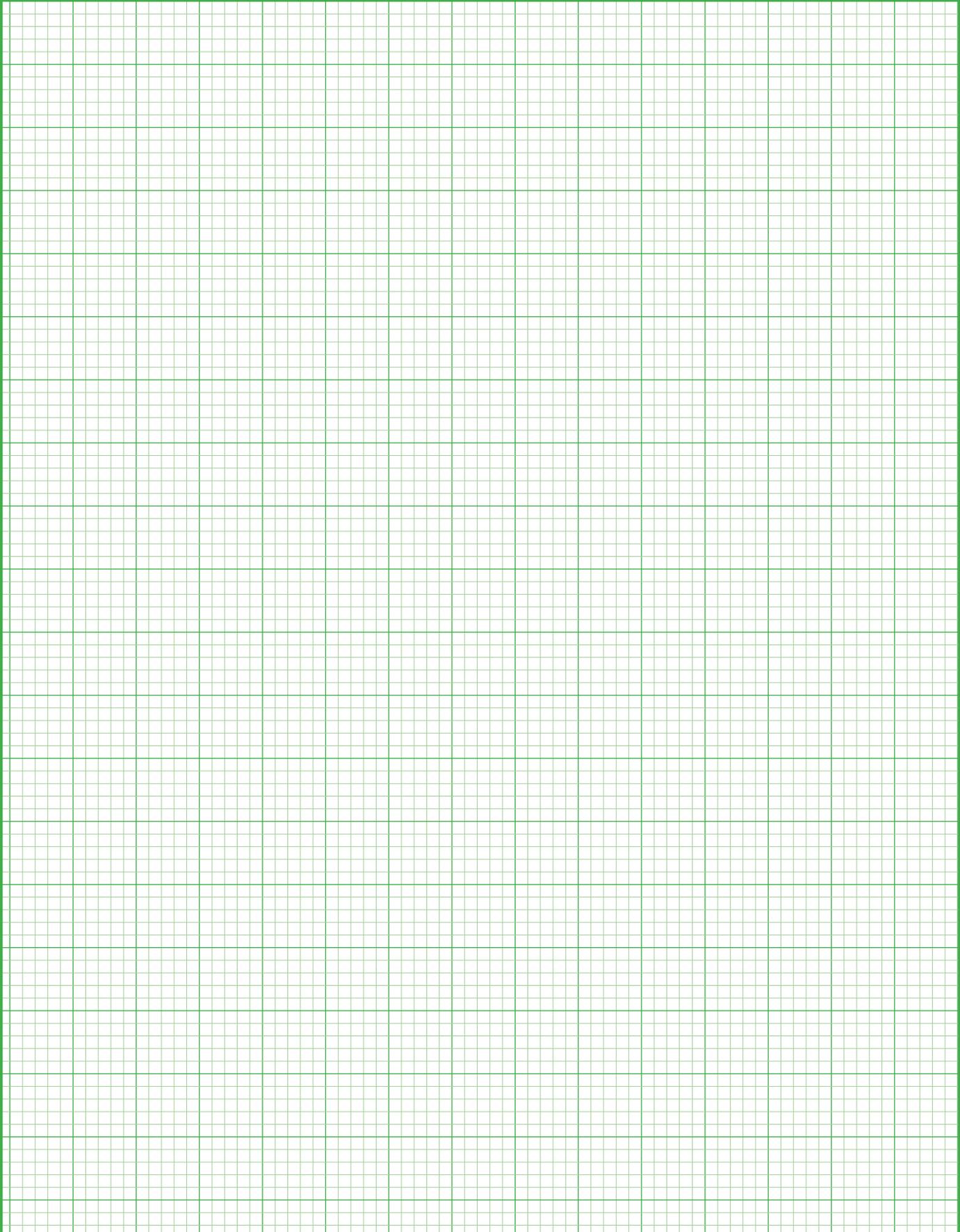
Helpful Facts

- Cedar wood is a slow decaying wood and does not need to be stained or treated.
- The Flame Amur Maple is a multi-stemmed deciduous tree with bright red fall color and summer fruits.

Planting Tips

- Call ahead to make sure nursery or garden store has the plants you need for lot design.
- The best time to plant trees and shrubs is spring or fall.
- Do not plant in extreme heat. Early mornings or evenings are ideal.
- Water after planting and as needed. Do not let soil dry out.
- Weed weekly or as needed.
- Prune roses in early spring.
- Prune maple in late summer after the leaves have fully developed.
- Mulch conserves water and helps protect trees and plants from mowers.
- You can purchase additional mulch or create a stepping stone pathway from alley parking lot to your house.

Draw Your Lot



Rear Parking Partner Field Notes



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**working
with lots**
A FIELD GUIDE

**Visit DFC-lots.com
#DFClots**

Image Source: Tony Alter. "Red_Double_Knockout_Rose_close." 12 April 2010 via Wikimedia, CC BY 2.0