



# CEDAR HILLS

## CITY COUNCIL MEETING OF THE CITY OF CEDAR HILLS Tuesday, September 17, 2024 6:00 p.m.

Notice is hereby given that the City Council of the City of Cedar Hills, Utah, will hold a **City Council Meeting on Tuesday, September 17, 2024, beginning at 6:00 p.m.** at the Community Recreation Center, 10640 N Clubhouse Drive, Cedar Hills, Utah. This is a public meeting, and anyone is invited to attend.

### **COUNCIL MEETING**

1. Call to Order, Pledge led by C. Smith and Invocation given by C. Price
2. Approval of Meeting's Agenda
3. Public Comment: Time has been set aside for the public to express their ideas, concerns, and comments (comments limited to 3 minutes per person with a total of 30 minutes for this item)

CONSENT AGENDA (Consent items are only those which require no further discussion or are routine in nature. All items on the Consent Agenda are adopted by a single motion)

4. Approval of the minutes from the August 6, 2024 and the August 13, 2024 City Council meetings

### CITY REPORTS AND BUSINESS

5. Mayor and Council, City Manager and Staff

### **SCHEDULED ITEMS & PUBLIC HEARINGS**

6. Review/Action and Public Hearing on approving a Conditional Use Permit related to approved building elevations and overhead doors for Lot 7 Cedar Hills Gateway Subdivision, located in the SC-1 Commercial Zone
7. Review/Action on acceptance of the public improvements and beginning of durability for Cedar Canyon Subdivision Lot 1
8. Discussion on regulating tree height throughout the City
9. Discussion on regulating residential Sport Courts and lighting
10. Discussion on security at the golf course and short course

### ADJOURNMENT

11. Adjourn

Posted this 13th day of September, 2024

/s/ Colleen A. Mulvey, City Recorder

- Supporting documentation for this agenda is posted on the city website at [www.cedarhillsutah.gov](http://www.cedarhillsutah.gov).
- In accordance with the Americans with Disabilities Act, the City of Cedar Hills will make reasonable accommodations to participate in the meeting. Requests for assistance can be made by contacting the City Recorder at 801-785-9668 at least 48 hours in advance of the meeting.
- A Closed Session may be called to order pursuant to Utah State Code 52-4-204 & 52-4-205.
- The order of agenda items may change to accommodate the needs of the City Council, the staff, and the public.
- This meeting may be held electronically to permit one or more of the council members or staff to participate.



## **PUBLIC MEETING AND PUBLIC HEARING ETIQUETTE**

**Please remember all public meetings and public hearings are recorded**

- All comments **must** be recognized by the Chairperson and addressed through the microphone.
- Please do not approach the Council/Commission dais without permission from the Chairperson.
- When speaking to the Council / Planning Commission, please stand, speak slowly and clearly into the microphone, and state your name and address for the recorded record.
- Be respectful to others and refrain from disruptions during the meeting. Please refrain from conversation with others in the audience as the microphones are very sensitive and can pick up whispers in the back of the room.
- Keep comments constructive and not disruptive.
- Avoid verbal approval or dissatisfaction of the ongoing discussion (i.e., booing or applauding).
- Exhibits (photos, petitions, etc.) given to the City become the property of the City.
- Please silence all cellular phones, electronic devices or other noise making devices.
- Be considerate of others who wish to speak by limiting your comments to a reasonable length and avoiding repetition of what has already been said. Individuals may be limited to three minutes and group representatives may be limited to five minutes.
- Refrain from congregating near the doors or in the area outside the council room to talk as it can be very noisy and disruptive. If you must carry on conversation in this area, please be as quiet as possible. (The doors must remain open during a public meeting/hearing.)

### **Public Hearing v. Public Meeting:**

If the agenda item is a **public hearing**, the public may participate during that time and may present opinions and evidence for the issue for which the hearing is being held. In a public hearing there may be some restrictions on participation such as time limits.

Anyone can observe a **public meeting**, but there is no right to speak or be heard there - the public participates in presenting opinions and evidence at the pleasure of the body conducting the meeting.

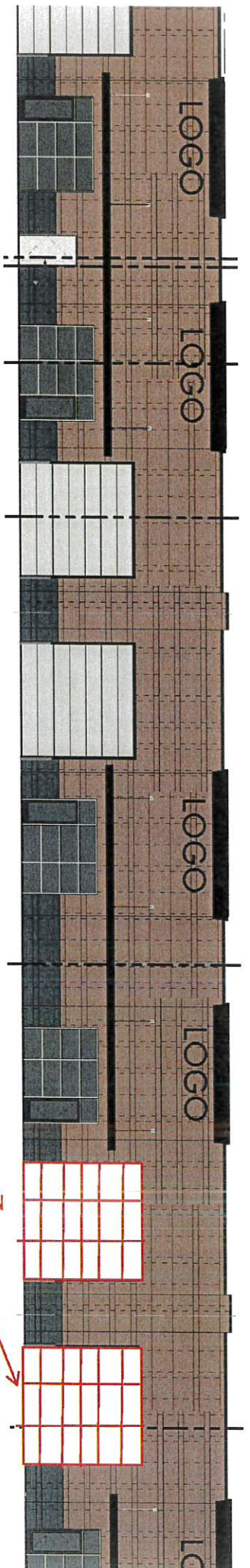


# The City of Cedar Hills

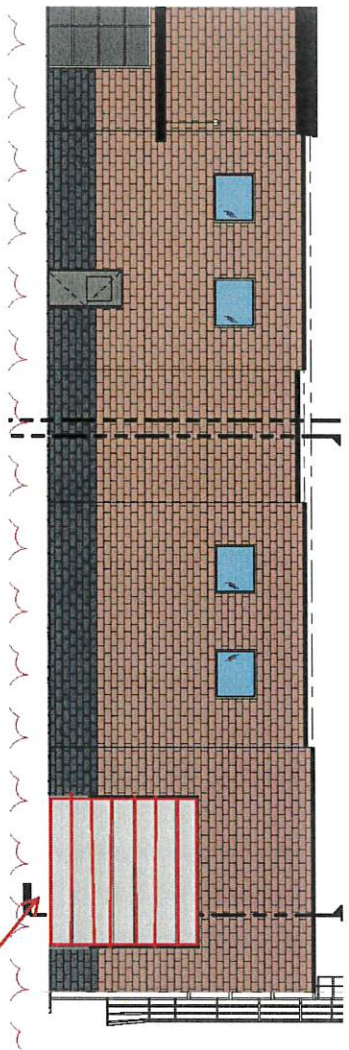
|              |                                |
|--------------|--------------------------------|
| <b>TO:</b>   | Mayor and City Council         |
| <b>FROM:</b> | Chandler Goodwin, City Manager |
| <b>DATE:</b> | September 17, 2024             |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                         |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SUBJECT:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Review/Action and Public Hearing on approving a Conditional Use Permit related to proposed changes in building elevations to Lot 7 Cedar Hills Gateway Subdivision, located in the SC-1 Commercial Zone |
| <b>APPLICANT PRESENTATION:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Ryan Bybee, Project Owner                                                                                                                                                                               |
| <b>STAFF PRESENTATION:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Chandler Goodwin, City Manager                                                                                                                                                                          |
| <b>BACKGROUND AND FINDINGS:</b><br>Mr. Bybee owns the nearly complete structure on Lot 7 of the Cedar Hills Gateway Subdivision. He has requested an alteration to the approved building plans by removing two overhead doors from the front elevation, replacing those with storefront windows, and adding a single overhead door on the south elevation off of 9900 N. The request is for a conditional use permit to add the single overhead door on the south side of the building. |                                                                                                                                                                                                         |
| <b>PREVIOUS LEGISLATIVE ACTION:</b><br>Planning Commission gave their recommendation as part of the August 2024 meeting.                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                         |
| <b>FISCAL IMPACT:</b><br>None                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                         |
| <b>SUPPORTING DOCUMENTS:</b><br>Proposed changes to the elevations                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                         |
| <b>RECOMMENDATION:</b><br>Staff recommends that the City Council approve the changes to the elevation as stated above.                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                         |
| <b>MOTION:</b><br>To approve/not approve the Conditional Use Permit to amend the proposed elevations for Lot 7 of the Cedar Hills Gateway Subdivision, located at 4700 W and 9900 N. Subject to the following conditions: {LIST ANY CONDITIONS NECESSARY FOR APPROVAL}                                                                                                                                                                                                                  |                                                                                                                                                                                                         |
| <b>ACTION:</b><br>Motion:<br>Second:<br>Laura Ellison: Yes__ No__ Abstain__ Absent__<br>Mike Geddes: Yes__ No__ Abstain__ Absent__<br>Bob Morgan: Yes__ No__ Abstain__ Absent__<br>Erika Price: Yes__ No__ Abstain__ Absent__<br>Kelly Smith: Yes__ No__ Abstain__ Absent__                                                                                                                                                                                                             |                                                                                                                                                                                                         |





NEW EXTERIOR STORE FRONT WINDOWS



NEW 12' X 14'  
OVERHEAD  
DOOR -  
MATCH  
EXISTING



# The City of Cedar Hills

|              |                                |
|--------------|--------------------------------|
| <b>TO:</b>   | Mayor and City Council         |
| <b>FROM:</b> | Chandler Goodwin, City Manager |
| <b>DATE:</b> | September 17, 2024             |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| <b>SUBJECT:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                          | Review/Action on acceptance of the public improvements and beginning of durability for Cedar Canyon Subdivision Lot 1 |
| <b>APPLICANT PRESENTATION:</b>                                                                                                                                                                                                                                                                                                                                                                                                                           | Travis Olsen, Nate Ricks; Ownership                                                                                   |
| <b>STAFF PRESENTATION:</b>                                                                                                                                                                                                                                                                                                                                                                                                                               | Chandler Goodwin, City Manager                                                                                        |
| <b>BACKGROUND AND FINDINGS:</b><br>The public improvements for Cedar Canyon Lot 1 have been installed and inspected. The improvements meet the standards established by the City and are of sufficient quality to be accepted and enter the durability period. The durability period will last one year, at which time any degradation or failure will need to be rectified by the owner/developer or the the bond may be drawn to correct deficiencies. |                                                                                                                       |
| <b>PREVIOUS LEGISLATIVE ACTION:</b><br>N/A                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                       |
| <b>FISCAL IMPACT:</b><br>N/A                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                       |
| <b>SUPPORTING DOCUMENTS:</b><br>N/A                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                       |
| <b>RECOMMENDATION:</b><br>To accept the public improvements of the Cedar Canyon Lot 1 project                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                       |
| <b>MOTION:</b><br>To approve/not approve and accept the public improvements associated with the Cedar Canyon Lot 1 subdivision, and allow the subdivision to enter the one year durability phase.                                                                                                                                                                                                                                                        |                                                                                                                       |
| <b>ACTION:</b><br>Motion:<br>Second:<br>Laura Ellison:        Yes__ No__ Abstain__ Absent__<br>Mike Geddes:        Yes__ No__ Abstain__ Absent__<br>Bob Morgan:        Yes__ No__ Abstain__ Absent__<br>Erika Price:        Yes__ No__ Abstain__ Absent__<br>Kelly Smith:        Yes__ No__ Abstain__ Absent__                                                                                                                                           |                                                                                                                       |



# The City of Cedar Hills

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| <b>TO:</b>   | Mayor and City Council         |
| <b>FROM:</b> | Chandler Goodwin, City Manager |
| <b>DATE:</b> | September 17, 2024             |

|                                |                                                          |
|--------------------------------|----------------------------------------------------------|
| <b>SUBJECT:</b>                | Discussion on regulating tree height throughout the City |
| <b>APPLICANT PRESENTATION:</b> | N/A                                                      |
| <b>STAFF PRESENTATION:</b>     | Chandler Goodwin, City Manager                           |

**BACKGROUND AND FINDINGS:**

Councilmember Smith requested that this discussion item be placed on the agenda after listening to a resident's concerns. Staff has looked into this issue and cannot find any instances where a municipality regulates tree heights. The resident's concern was related to neighboring trees possibly falling as a result of a windstorm and causing damage to their property. In this case, should the City limit tree height? In the instance above, the issue would be a civil matter that would need to be resolved among neighbors and insurance carriers. Additionally, topping trees after they reach a certain height is unsightly and damages the tree, possibly killing it. Arborists do not recommend this method of tree maintenance. Finally, as far as enforcement is concerned, there is only one staff member dedicated to code enforcement. With limited time available, City Council would need to identify how enforcement would happen given limited resources.

**PREVIOUS LEGISLATIVE ACTION:**

N/A

**FISCAL IMPACT:**

N/A

**SUPPORTING DOCUMENTS:**

Arborist information on tree topping ( page 23).

**RECOMMENDATION:**

Staff does not recommend that the City Council adopt any measures that regulate tree height.

**MOTION:**

No motion necessary, discussion item only.

**ACTION:**

Motion:

Second:

Laura Ellison: Yes\_\_ No\_\_ Abstain\_\_ Absent\_\_

Mike Geddes: Yes\_\_ No\_\_ Abstain\_\_ Absent\_\_

Bob Morgan: Yes\_\_ No\_\_ Abstain\_\_ Absent\_\_

Erika Price: Yes\_\_ No\_\_ Abstain\_\_ Absent\_\_

Kelly Smith: Yes\_\_ No\_\_ Abstain\_\_ Absent\_\_



United States  
Department of Agriculture

Forest Service

Northeastern Area  
State and Private Forestry

NA-FR-04-07  
November 2008



# **Tree Owner's Manual**

**for the  
Northeastern  
and  
Midwestern  
United States**

[www.treeownersmanual.info](http://www.treeownersmanual.info)

# Tree Owner's Manual for the Northeastern and Midwestern United States



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The use of trade or firm names in this publication is for reader information and does not imply endorsement of the U.S. Department of Agriculture of any product or service.

## IMPORTANT PRECAUTIONS

**WARNING:** To reduce the risk of personal injury or permanent damage to your tree, read and follow these important precautions:

- ☐ Do not dig until you are sure there are no buried utilities. Call the free utility marking service at 1-888-258-0808 (p. 5).
- ☐ Never prune trees or branches that are within 10 feet of utility lines; contact your local utility company.
- ☐ Keep lawn mowers and weed whips away from the base of your tree.
- ☐ Do not tie string, ribbon, wire, or pet leashes around the trunk or branches.
- ☐ Do not allow construction activities (digging, repaving, grading, building) within the Protected Root Zone (p. 24).
- ☐ Do not top your tree (p. 23).
- ☐ When hiring an arborist, select someone who has general liability insurance of at least \$1 million per occurrence and \$2 million aggregate (p. 28).
- ☐ Check with your city or town to see if there are laws regarding planting and pruning.
- ☐ If you cannot prune your tree with both feet on the ground, hire an arborist (p. 28).
- ☐ Do not let children climb trees that have branches within 25 feet of a power line.
- ☐ Do not nail or screw anything into your tree.

**These symbols are used throughout this manual:**



= Potential for personal injury or legal issues

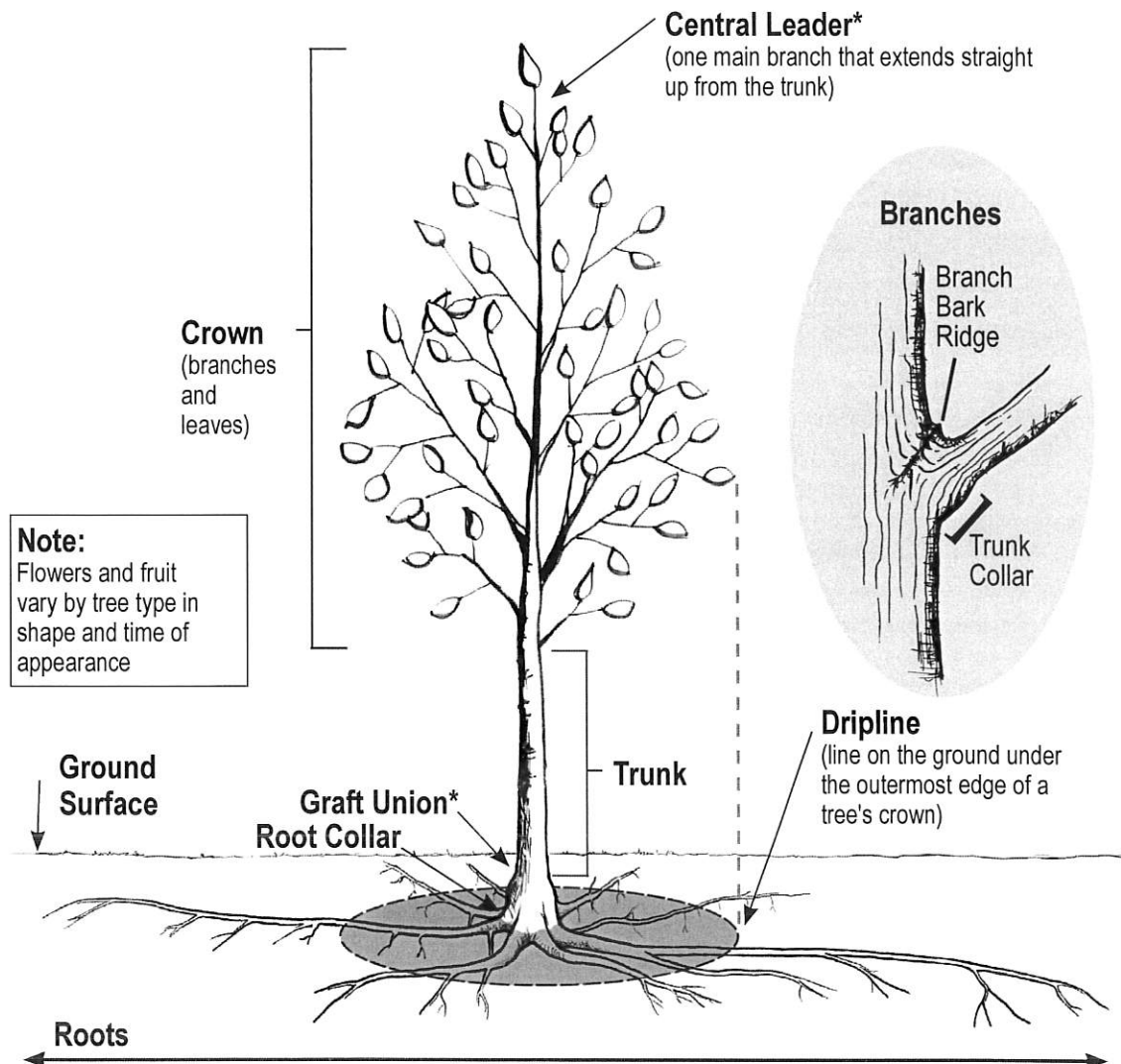


= Potential for permanent damage to tree

>>>>>> Save this manual for future reference. <<<<<<<

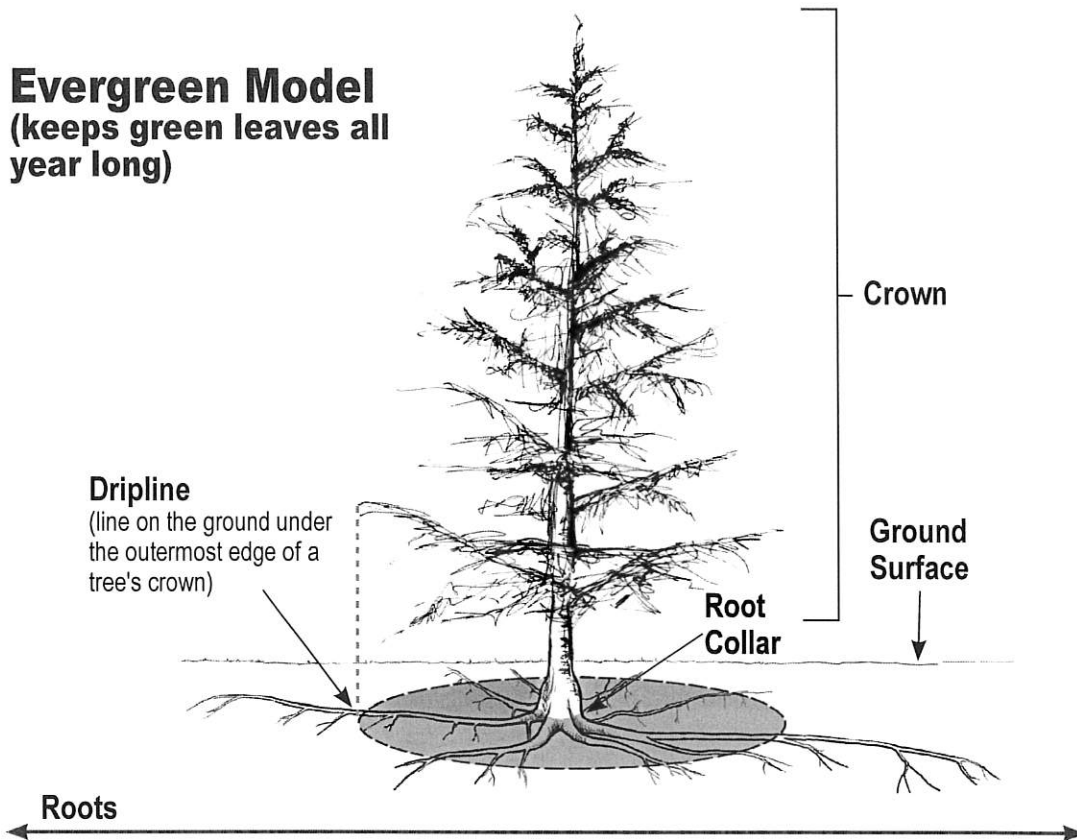
## MODEL INFORMATION AND PARTS DIAGRAM

### Deciduous Model (loses leaves in the autumn)



\*Not present on all trees

## Evergreen Model (keeps green leaves all year long)

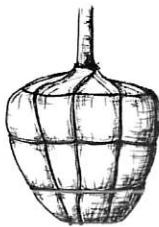


## PACKAGING

### Roots

Your tree has been packaged in one of the following ways:

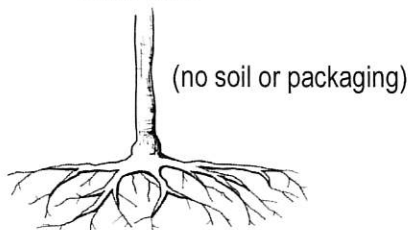
#### Balled and burlapped



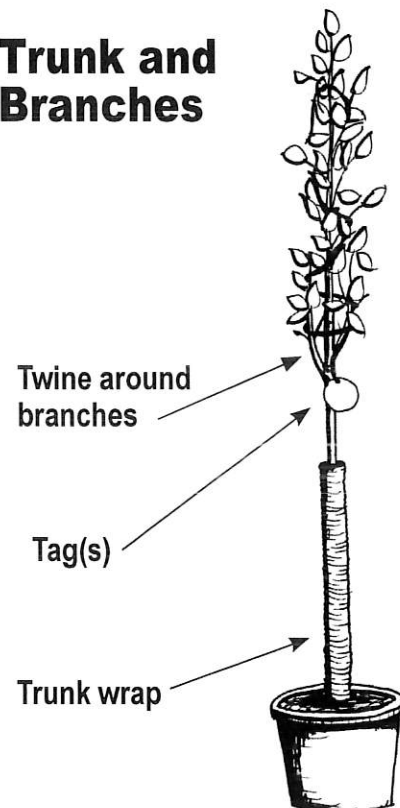
#### Containerized



#### Bare root



### Trunk and Branches



## PRE-INSTALLATION (PREPARING TO PLANT)

### Materials

- ☐ Tape measure
- ☐ Phone

### Instructions

#### Step 1: Check above ground.

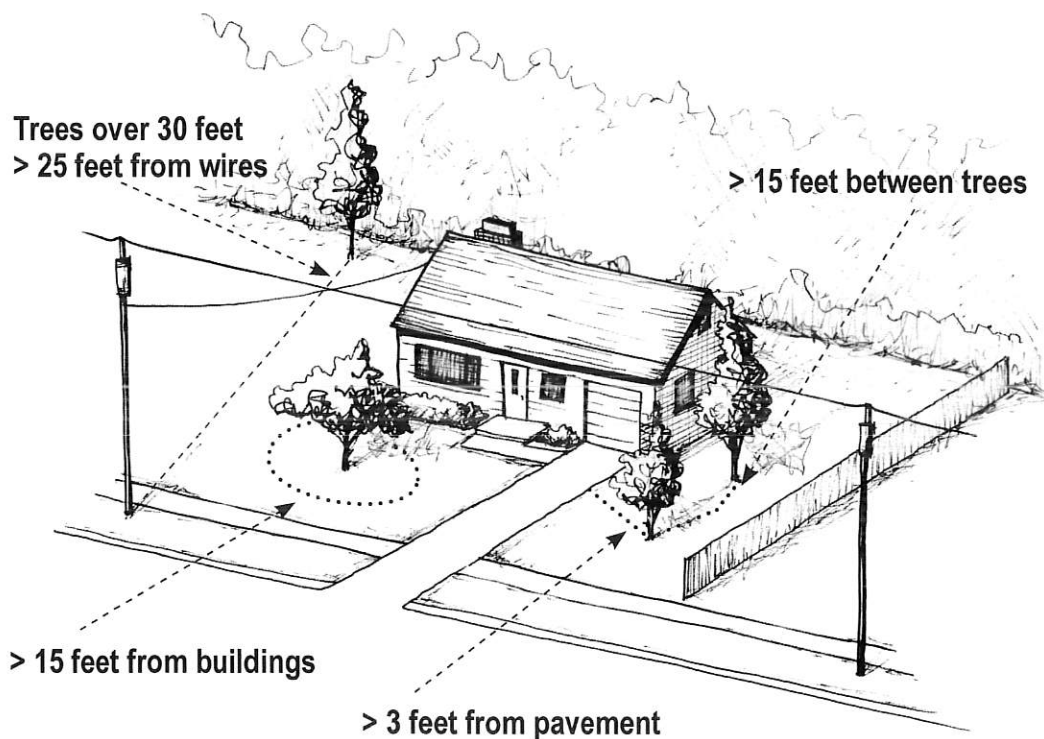
##### Your tree will grow.

Do not plant your tree where it will interfere with buildings, overhead utility lines, pavement, or intersection sightlines as it gets bigger.

Make sure your planting spot is at least. . .

- ☐ 3 feet from pavement or fencing on all sides
- ☐ 15 feet from buildings or other trees
- ☐ 25 feet from overhead electric wires, if your tree will grow taller than 30 feet.

If your tree will grow taller than 30 feet, do not plant it within 25 feet of overhead electric wires.



## Step 2: Check below ground.

⚠ It's the law to call (in most states).

⚠ Shocks can be deadly.

At least 72 hours in advance of planting, call the underground utility locating service in your area to be sure that there are no buried utilities where you want to plant. Most services will mark utilities (e.g., electric, cable, gas) for free.



## Step 3: Check laws.

Some government agencies have laws governing tree planting, care, and removal. Check with your town or municipality to be sure that you are complying with these regulations and landscape ordinances.

### Will Your Tree Become a "Public Tree," Under the Control of Your City or Town?

Public trees are those located on municipal property or within the road right-of-way (ROW)—regardless of who planted the tree.

The ROW is an extension of your city's or town's control beyond the street edge, oftentimes reaching 10 feet or more beyond the pavement.

Trees located within the ROW are under the jurisdiction of the municipality.

In these cases, state or local laws may dictate the type and location of trees that can be planted in the ROW. Check with your city or town regarding ordinances or policies pertaining to public trees.

## INSTALLATION (PLANTING)\*

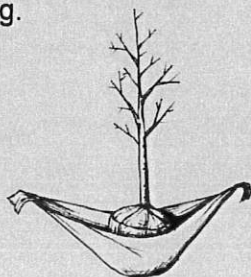
### How to Move Your Tree

Carry your tree by its root package (ball or container)—not the trunk! Steady it by holding the lowest part of the trunk.

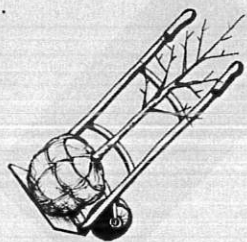
Large containerized trees may be tipped onto the bottom edge and rolled.



For balled-and-burlapped trees, you may find it easiest to place tarps or ropes under the ball as a sling.



A dolly or other cart may also be used.



**⚠️ Protect the trunk.**  
Even a small wound on a young tree can cause permanent damage.

### Materials

- ☐ Tape measure or yard stick
- ☐ Metal skewer, coat hanger, stout wire, or pointed screwdriver
- ☐ Shovel
- ☐ Sharp knife or scissors
- ☐ Hand pruner—*bypass* type (p. 19)
- ☐ 5 gallons of water
- ☐ 4-5 cubic feet of mulch (one wheelbarrow load or two large bags)
- ☐ Large-gauge wire cutter if balled and burlapped
- ☐ Hand saw if containerized and the main root system is more than 1 inch below the soil surface (Step 4). An inexpensive folding pruning saw works well, but any saw would work.

### Instructions

**⚠️ If you have NOT yet read the section on Pre-Installation (Preparing to Plant), do so now.**

**⚠️ Do not dig until Step 6.**

\*Hargrave, R.; Johnson, G.; Zins, M. 2002. Planting trees and shrubs for long-term health. St. Paul, MN: University of Minnesota Extension Service. 12 p.

## Step 1. Move the tree.

### **⚠️! Young trees are not 2 by 4's.**

Do not lift or carry your tree by its trunk (unless bare root). See the sidebar on How to Move Your Tree.

## Step 2. Remove trunk and branch packaging.

Remove trunk wrap, twine around the branches, and labels. Leave any root packaging in place for now.

## Step 3. Prune critical branches and no others!

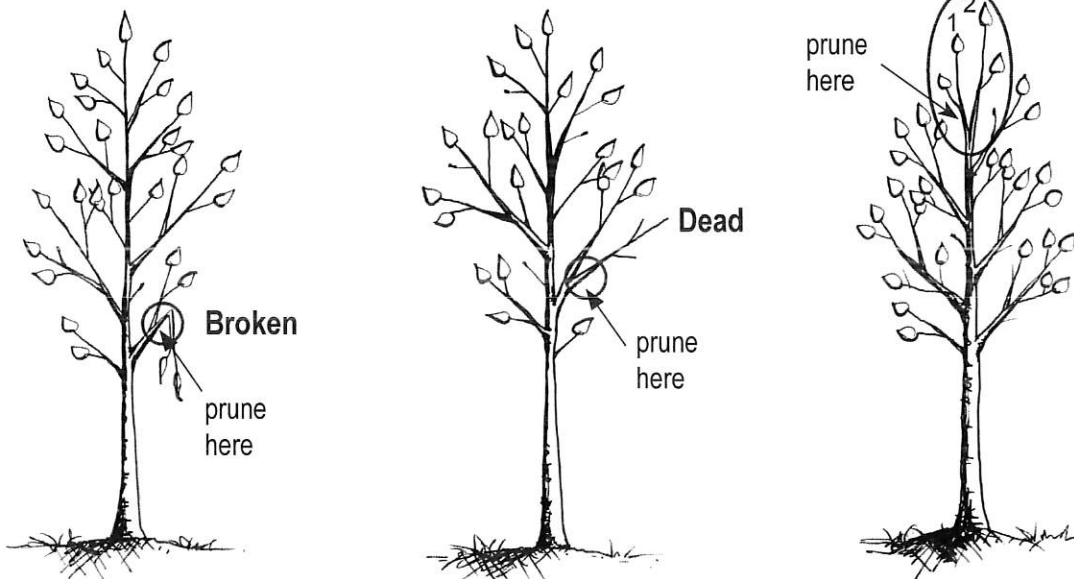
Prune only branches that are broken or dead. You may also remove competing leaders, if present. Most trees should have one central leader (p. 2-3). If there are two or more leaders, choose which one you want to remain and remove the other(s).

### **⚠️! Minimize pruning at the time of planting!**

Trees need as many leaves as possible to recover from transplant shock (leaves produce the tree's food).

### **⚠️! Do not prune oaks in the spring or early summer if you live in an area with oak wilt (see map, p. 21)!**

See "Pruning" p. 18.



## Step 4. Find the main root system, and remove excess soil.

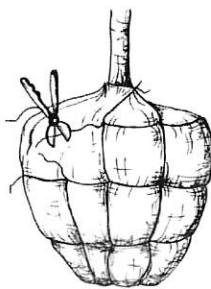
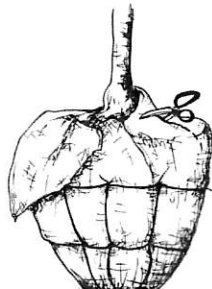
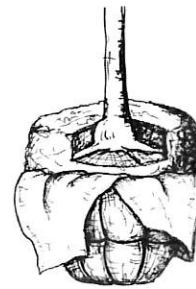
Remove soil from the top of the root ball until the top of the main root system is exposed. There should be several roots at least as big around as a pencil extending in opposite directions from the trunk. You may have to remove 2-4 inches of soil before finding the main roots.

 **TIP:** Probe the soil ball with a wire, kabob skewer, or screwdriver to find the main root system and estimate how much soil to remove. If the roots are located more than 4 inches deep, return the tree to the place of purchase.



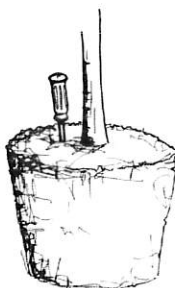
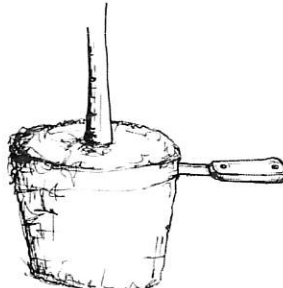
**Bare root trees:** There is no soil or root packaging to remove.

**Balled-and-burlapped trees:** Remove the top of the root ball packaging. Cut any twine from around the trunk taking care not to nick the bark. Then bend the wire basket back off the top of the ball. Remove soil from the top of the root ball until the main root system is found. You may have to cut some of the wire. Leave the rest of the wire basket in place until the tree is put in the ground.



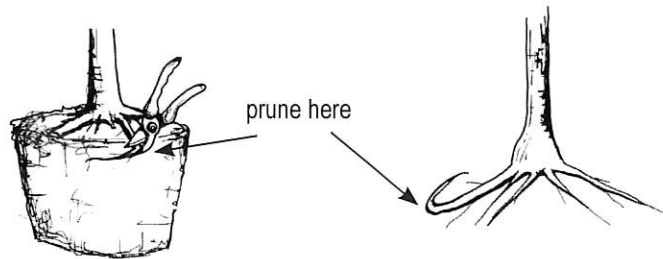
**Containerized trees:** Remove the entire container. Pull or cut the soil off the top of the root ball until the main root system is found.

 **TIP:** A saw works well to remove the top layer of soil. Be careful not to cut into the trunk.



## Step 5. Remove problem roots.

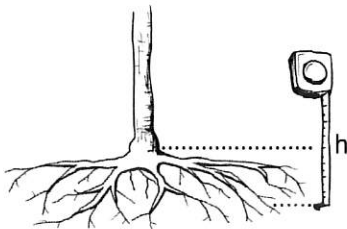
- A. Remove all small roots above the main root system with a hand pruner.
- B. Examine the main root system for roots that extend out but then turn to the side or back towards the trunk. Prune these roots at the point where they turn.



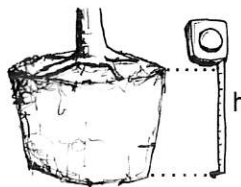
## Step 6. Determine how deep and wide to dig.

- A. Measure the height of the remaining root ball. This is exactly how deep you should dig the hole.
- B. Measure the approximate width of the root ball or root system. Multiply this by 2, or if your soil is hard (clay or compacted), by at least 3. This is how wide you should dig the hole.

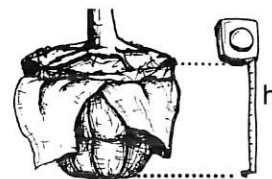
**Bare root**  
(roots spread out flat  
on the ground)



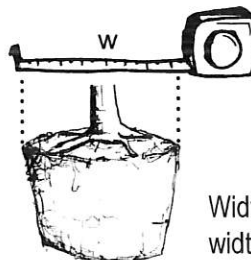
**Containerized**  
(excess soil removed)



**Balled and burlapped**  
(excess soil removed)



$h$  = depth of planting hole

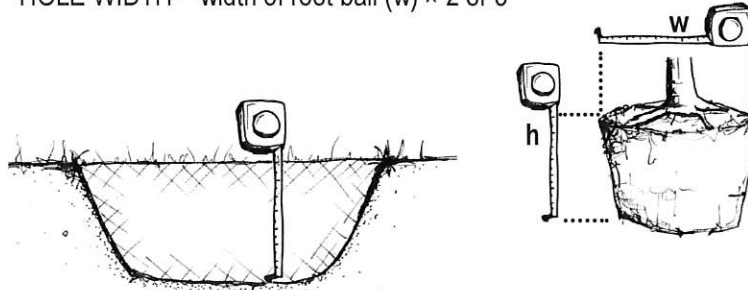


Width of hole should be 2-3 times the  
width of the root ball

## Step 7. Dig a hole.

**⚠** Do not put a \$100 tree in a \$10 hole. The dimensions of the hole are very important in determining the survival of your tree. Dig the hole ONLY as deep as the root system (NO deeper!).

HOLE DEPTH = height of root ball (h)  
HOLE WIDTH = width of root ball (w) × 2 or 3

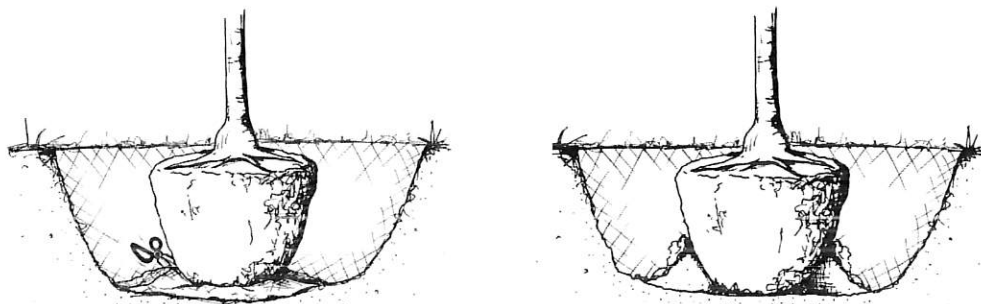


## Step 8. Put the tree in the hole.

If the tree has a heavy root ball, slide it into the hole, and straighten the trunk.

## Step 9. For balled-and-burlapped trees, remove root ball packaging.

Balled-and-burlapped trees: Without loosening the root ball, cut, peel back, and remove as much of the wire basket and burlap as possible (at least the top third).



**⚠** A root ball should remain a root ball. If it starts to fall apart as you take off the wire and burlap, backfill the hole with enough soil to stabilize it. Then carefully remove the wire and burlap, and backfill as you go to keep the root ball intact.

## Step 10. Backfill with the same soil.

Make sure the trunk is straight. Put the original soil back in the hole, breaking up large clods, and working it in with your hands or a shovel.

## Step 11. Water.

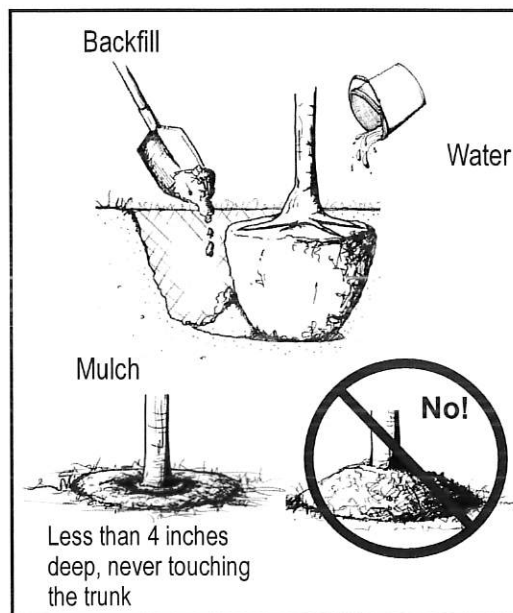
Water the root ball and entire backfilled area.

## Step 12. Mulch.

Put a 2-4 inch layer of mulch over the backfilled area. Pull mulch away from the trunk so that none touches the bark.

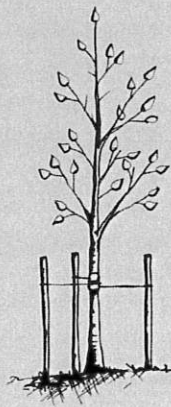
### **Mulch becomes soil.**

There should never be more than 4 inches of mulch over the roots. Too much can prevent the roots from getting necessary oxygen.

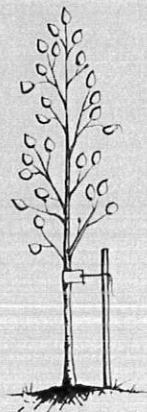


## To Stake or Not to Stake

Some trees need to be staked to remain standing straight in their new planting site. Stake only if the root ball is unstable or the trunk is bending. Use wide nylon, canvas straps, or nylon stockings wrapped around one side of the trunk. The tree should not be tied tightly.



If the root ball is unstable, use 1-3 stakes attached LOW on the trunk.



If the trunk is bending, use 1 stake attached HIGHER (at least 6 inches below the first set of branches).

 **Remove stakes after 1-2 years.**

## MAINTENANCE SCHEDULE

Follow this maintenance schedule for the life of your tree. Detailed instructions are on the pages indicated in parentheses.

| Type of Care                          | Timeline                                                          |                                                                |                                        |                                                                                             |
|---------------------------------------|-------------------------------------------------------------------|----------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------------|
|                                       | At planting                                                       | Years 1 to 3                                                   | Years 4 to 10                          | After 10 years                                                                              |
| Water (p. 13)                         | 5 gallons                                                         | Correct amount is <i>critical</i> from spring through autumn → | As needed from spring through autumn → |                                                                                             |
| Mulch (p. 16)                         | 2-4 inches deep, not against trunk                                | Check and adjust level in spring →                             |                                        |                                                                                             |
| Protect Trunk (p. 14)                 | As needed →                                                       | Check in spring and autumn →                                   |                                        | N/A                                                                                         |
| Stake (p. 11)                         | Only if needed →                                                  | Check in spring and autumn. Remove after 1-2 years.            | N/A                                    | N/A                                                                                         |
| Clean Root Collar (p. 15)             | N/A                                                               | Clean root collar every year →                                 |                                        |                                                                                             |
| Check for Encircling Roots (p. 9, 15) | Check before planting (p. 9)                                      | N/A                                                            | Check every 4-5 years (p. 15) →        |                                                                                             |
| Check Health (p. 17, 35)              | Select a healthy tree (p. 35)                                     | Inspect leaves, branches, crown and trunk every year (p. 17) → |                                        |                                                                                             |
| Check Safety (p. 17)                  | N/A                                                               | Inspect in summer, winter, and after storms (p. 17) →          |                                        |                                                                                             |
| Prune* (p. 7, 18-23)                  | Prune only critical branches or to eliminate extra leaders (p. 7) | Prune lightly in Year 2 or 3 (p. 18-23)                        | Every 3 years                          | Fruit trees every 1-3 years, deciduous shade trees every 5 years, evergreens only as needed |

\*For some tree types, pruning or removal during spring and summer requires special care to prevent disease transmission. See p. 20 for details.

N/A—not applicable

## MAINTENANCE INSTRUCTIONS

### Watering\*

An important factor in tree survival is providing the right amount of water. The first 3 years are most critical, but pay attention to watering needs throughout the tree's life.

#### How often and how much?

Frequency depends on soil drainage. Soils that drain quickly will require more frequent watering than those that drain slowly. To determine your soil's drainage rate, see p. 34. The best way to know how often and how much to water is to check the soil moisture at 6 inches below the surface. Water when dry.

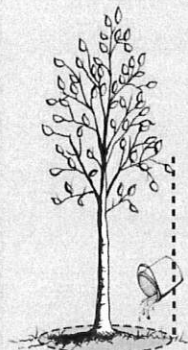
**First 3 years after planting:** If the soil is dry, provide about 1-1/2 gallons of water per diameter inch of the trunk.

**All other years:** Because soil type and weather conditions influence the demand for water, irrigation schedules and amounts vary.

#### Tree roots need oxygen.

Soil saturated with water for more than 24 hours can prevent roots from getting oxygen. Therefore, watering too much is as dangerous as watering too little (and is harder to correct).

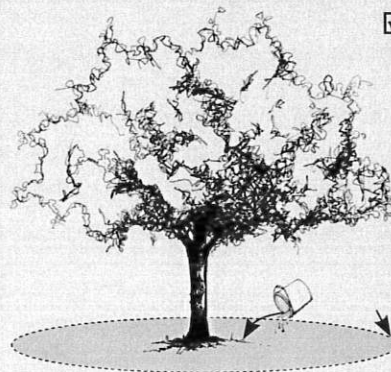
#### First 3 years after planting:



- ☑ Check every other day in fast-draining soils, weekly in slow-draining soils

Water within the dripline

#### All other years:



- ☑ Check weekly

Water within the dripline or, for large trees, at the base and at the dripline

**Where?** Water the area within the *dripline*. For large trees, focus watering on the area within 6 feet of the trunk and at the dripline.

**When?** Start checking soil moisture and watering when necessary in early spring, and continue until the soil freezes.

\*Gilman, E. 1997. Trees for urban and suburban landscapes. Albany, NY: Delmar Publishers. 662 p.

## Installing a Trunk Guard

### Trunk Protection

Young deciduous trees have thin bark that can easily be damaged by animals and equipment (most commonly string trimmers and lawn mowers). Mulch does a great job of keeping grass (and therefore grass-cutting equipment) away from trunks, but rodents such as rabbits and mice like to chew on young bark (usually low on the trunk). Deer also scrape tree trunks with their antlers.

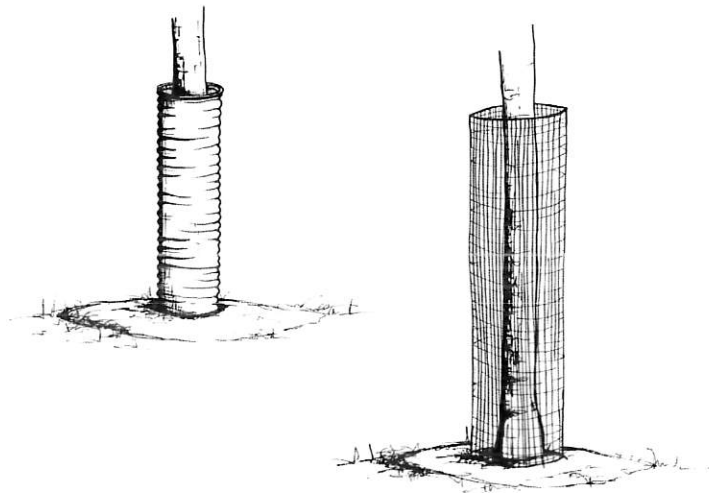
To prevent long-term damage associated with trunk wounding, install plastic tubing or hardware cloth (stiff wire fencing with 1/4-1/2 inch mesh squares) around the trunk. The tube should be big enough around to allow 1-4 inches of space between it and the trunk. It should be 1-3 feet tall (extending above the anticipated snow depth) for small rodents and as tall as possible for deer.

**How?** Wrap the tube around the trunk, taking care not to scratch the bark. Use a few pieces of wire to keep the tube closed. Push the tube into the ground or mulch less than an inch. Attach it to one or two stakes if necessary.

**When?** At a minimum, the trunk should be protected during the winter months (apply early in the autumn to prevent deer scraping). Protection can be applied anytime and left on all year round, as long as it does not touch the bark.

**⚠️ Your tree will grow.**

As the tree grows, the tube will need to be enlarged and eventually removed.



## Preventing and Correcting Encircling Roots\*

### Problem

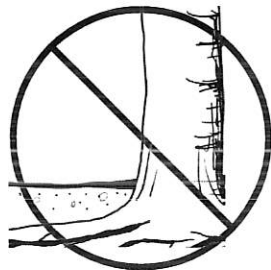
Roots that encircle the trunk will likely cause health or safety problems later. Make sure that soil or mulch is never piled against the root collar.



Root likely to become a problem (when trunk and root meet)



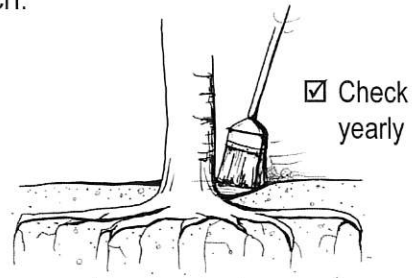
Problem root already touching the trunk



Covering the root collar with soil or mulch encourages encircling roots

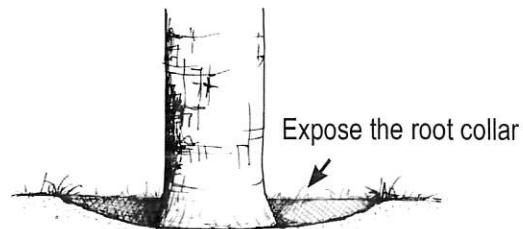
### How to Prevent

Plant at correct depth (see Planting Steps 4-7, p. 8-10). Annually clean the root collar by removing soil and mulch.



### How to Monitor and Correct

Every 4-5 years, check for roots that encircle the trunk. Use a hand trowel to loosen and remove the soil around the base of the tree until the first set of roots is found.



**TIP:** Removing soil with a wet-dry vacuum speeds the work without harming the roots.

If a tree has an encircling root, leave the top of the root exposed, and consult an arborist regarding treatment. When caught early, this can be an inexpensive and effective way to save your tree.

\*Johnson, G.; Fallon, D. 2007. Stem girdling roots: the underground epidemic killing our trees. St. Paul, MN: University of Minnesota.

## Mulching

Maintain a ring of mulch around the tree (the wider the better). Organic materials like wood chips and leaves are best. Wood chips will take longer to break down and, therefore, will not require replacement as often.



### **TIP: Newspaper kills grass.**

If there is grass in the area that needs to be mulched, put a 5-page layer of newspaper over the grass, and then add mulch on top (this will help keep the grass from growing up through the mulch).



### **Mulch becomes soil.**

There should never be more than 4 inches of mulch over the roots. Too much mulch or soil can prevent oxygen from reaching the roots.

## Fertilizing

Apply nitrogen fertilizer **ONLY** if diagnosis by an arborist indicates that it is necessary.

Apply other fertilizers **ONLY** if a soil test shows that nutrients are lacking.



### **Do not overdose.**

Fertilizer that is not absorbed by the tree has the potential to alter the soil or leach out and pollute groundwater, rivers, ponds, and lakes. Overdosing with fertilizer can harm your tree.



### **Applying “weed and feed” to your lawn might injure or kill your tree.**

Some combination weed killers and lawn fertilizers will injure trees. Do not use anything that states it will kill broadleaved weeds (most deciduous trees are broadleaved). Preemergent herbicides are safe to use near trees.

## Checking Tree Health

Tree health can be difficult to determine, but checking your tree yearly may help you notice problems as they appear.

Is the current year's growth much less than past years' growth? Fast growth does not mean good health, but a dramatic reduction in growth rate may be an indication of poor health.

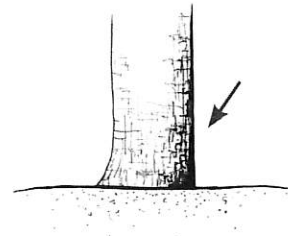


**TIP: Look at the branch tips or tree top.** Current year's branches will typically be smaller in diameter and a different color.

Also inspect the size, color, and distribution of the leaves. Look at individual leaves as well as the whole crown for differences between branches or sections of the crown.

Inspect the base of the trunk for damage (e.g., from rodents or string trimmers).

Also inspect the base of the tree to see if there is a flat side to the trunk.



If anything is found, follow the guidance in the Troubleshooting section, p. 30-31.

## Checking Tree Safety



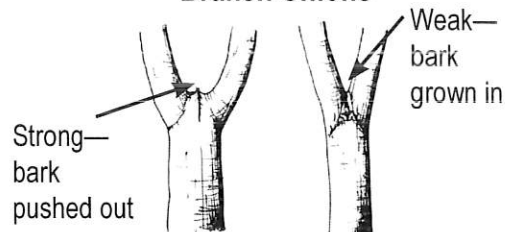
**Healthy trees can fall down.**

A tree may be green and lush, but that does not guarantee that it is structurally safe.

Inspect trees anytime, but especially after storms. Examine the crown, branches, trunk, and area around the roots for these common dangers:

- Broken, dead, or hanging branches
- Cracks, fungi, and cavities
- Weak trunk or branch unions
- Encircling root compressing the trunk (a flat-sided trunk at the ground level is a good indicator). See illustration above.
- Recent lean (especially if the soil or grass has lifted on one side).

### Branch Unions



If anything is found, or if in doubt, contact an arborist, p. 28.

## Pruning\*

Pruning can be dangerous work. Follow these safety precautions to be sure you are around to enjoy your tree.



**Electricity flows through branches.**

Never prune trees or branches that are within 10 feet of utility lines; instead contact your local utility company.



**Ladders and trees do not mix.**

If pruning cannot be done with both feet on the ground, hire an arborist (p. 28).



**Chainsaws cut limbs.**

If power equipment is required, hire an arborist (p. 28).

The main reasons for pruning trees are safety, health, and esthetics. Pruning can encourage trees to develop a strong structure and reduce the likelihood of damage during severe weather.

Pruning for safety involves removing branches that could fall and cause injury or property damage, trimming branches that interfere with lines of sight on streets or driveways, and removing branches that grow into utility lines.

Pruning for health involves removing diseased or insect-infested wood, thinning the crown to increase airflow and reduce some pest problems, and removing crossing and rubbing branches.

Pruning for esthetics involves enhancing the natural form and character of trees or stimulating flower production.

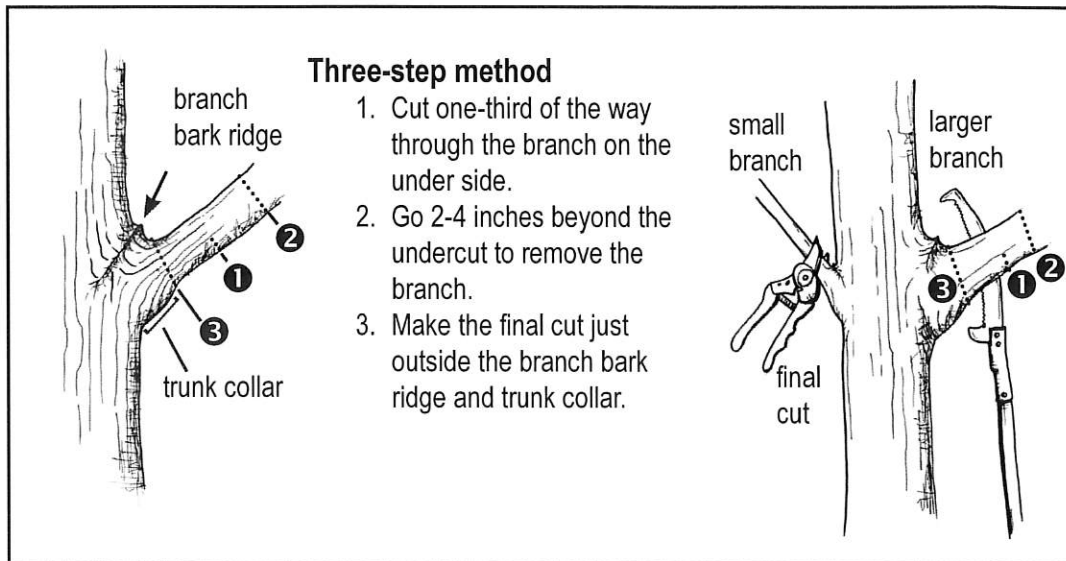
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\*Except where noted, this section has been adapted in part, from: Bedker, P.; O'Brien, J.; Mielke, M. 1995. How to prune trees. [Newtown Square], PA: USDA Forest Service Northeastern Area. 30 p.

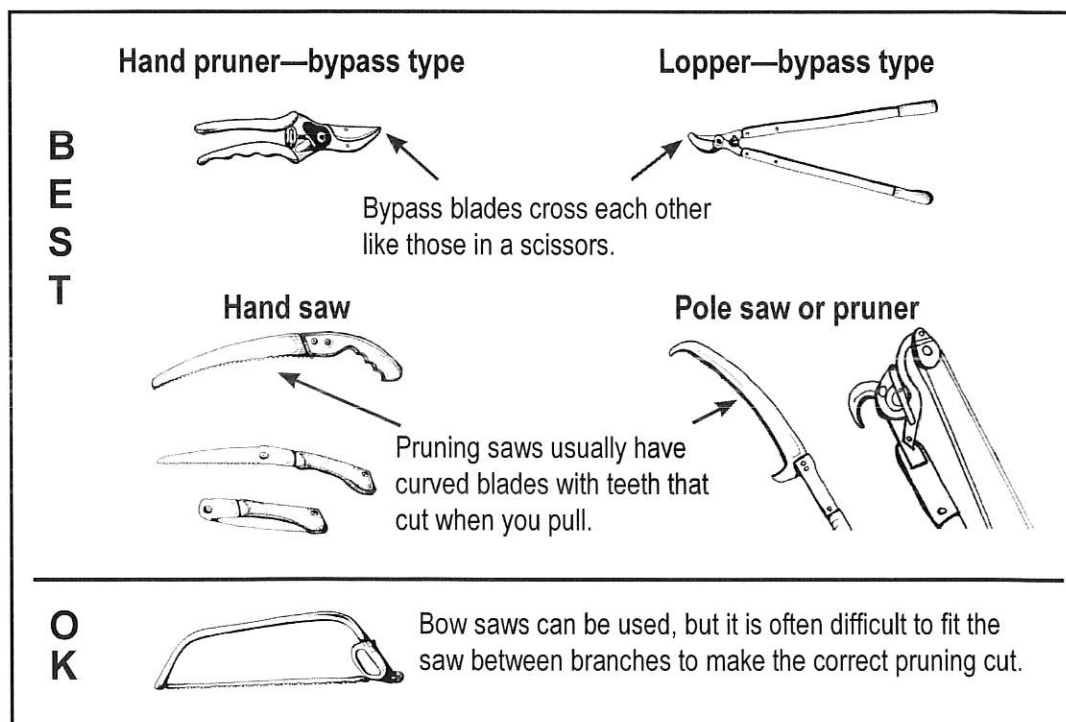
## Where to Cut

Support the branch with one hand while you make the cut to prevent the bark from ripping. If the branch is too large to support, use the three-step method (see details below).

For the final cut, look for the branch bark ridge and trunk collar. Begin the cut just outside of the branch bark ridge, and angle down away from the trunk. Stay close to the trunk collar without cutting into it (see images below).



## Pruning Tools



## How Often

Beginning 2 years after planting, prune lightly every year or every other year. After 10 years, frequency of pruning depends on the type of tree and amount of shade the canopy receives.

 **Do not remove more than 25 percent of the tree's live branches (and therefore leaves) at any one time.**

| Tree Type                    | First 10 years       | 10+ Years After Planting |
|------------------------------|----------------------|--------------------------|
| <b>Fruit trees</b>           | Once every 1-2 years | Once every 1-3 years     |
| <b>Deciduous shade trees</b> | Once every 1-2 years | Once every 4-7 years*    |
| <b>Evergreen trees</b>       | Only as needed**     | Only as needed**         |

\* Pruning lightly and more frequently is better than pruning heavily and less often.

\*\* Evergreen trees usually need pruning only if they are diseased or their branches need to be raised up from the ground. In either case, prune off the entire branch (p. 19).

Removal of the following can be done every year:

- Broken, dead, or rubbing branches
- Branches sprouting from the base of the trunk.

## Time of Year

Winter is best time of year to prune because branches are easy to see, diseases cannot be spread, and there is minimal stress to the tree. But for most trees, pruning can be done at any time. Exceptions are trees that are prone to fire blight or oak wilt.

Trees susceptible to fire blight include mountain ash, apple, crabapple, hawthorn, pear, flowering quince, and pyracantha. Trees susceptible to oak wilt include most oaks. To minimize disease infection of these types of trees, follow the pruning guidelines on the next page.

**FIRE BLIGHT**

**Range:** All counties in the United States

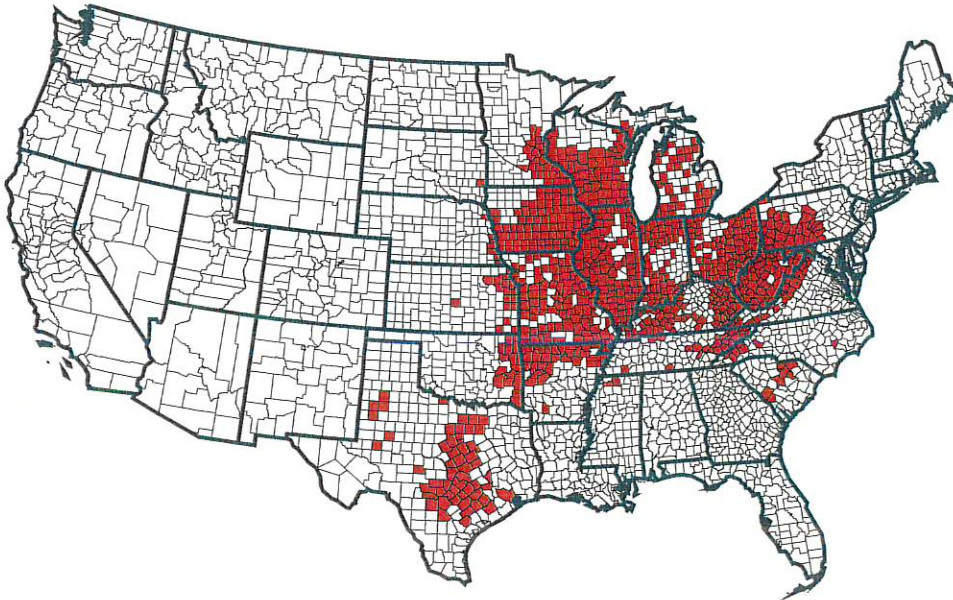
**Types of trees:** mountain-ash, apple, crabapple, hawthorn, pear, flowering quince, pyracantha

**Pruning guidelines:** Avoid pruning from the time that spring flowers emerge until leaves drop. If pruning must be done on these tree types during disease-transmission times, sanitize pruning tools before each branch is pruned. Use rubbing alcohol, or household bleach diluted 1 to 9 with water. Tools should be immersed in the solution, preferably for 1-2 minutes. Bleach is corrosive to metal, so tools should be thoroughly cleaned with soap and water after each use.

**OAK WILT**

**Range:** See map below

**Types of trees:** oaks



**Pruning guidelines:** Avoid pruning from early spring through early summer (April, May, and June in the Lakes States). Check with your plant diagnostic clinic (see page 31 for phone numbers) to get exact dates for your area. If pruning must be done on oaks during disease-transmission times, immediately apply wound paint after the cut is made.



**Wound dressings are not necessary in any other case.** In fact, they may be harmful.

## Pruning Young Trees\*

Pruning a young tree saves money. Removing small branches is fairly easy compared with waiting until limbs are large, when pruning can be costly and a bigger risk to the tree. Correctly pruning a tree when it's young will help it develop a strong, well-balanced crown. Prune to have the following:

### A. Branches that are well-attached to the trunk

Branches with a branch bark ridge (bark pushed out at the point where the branch attaches to the trunk) are less likely to break off in wind or heavy ice or snow. Branches that are less than half the diameter of the trunk are also less likely to break off in storms.

### B. One central leader

Most trees will be strongest if they have one central leader (instead of multiple). Unless your tree is an arborvitae or fruit tree, choose one leader to keep, and prune off the competitors.

### C. Good spacing between branches

Vertical space between branches should eventually be 12 inches for fruit or small-statured trees and 18 inches for medium- and large-stature deciduous trees. Try to space branches equally around the tree.

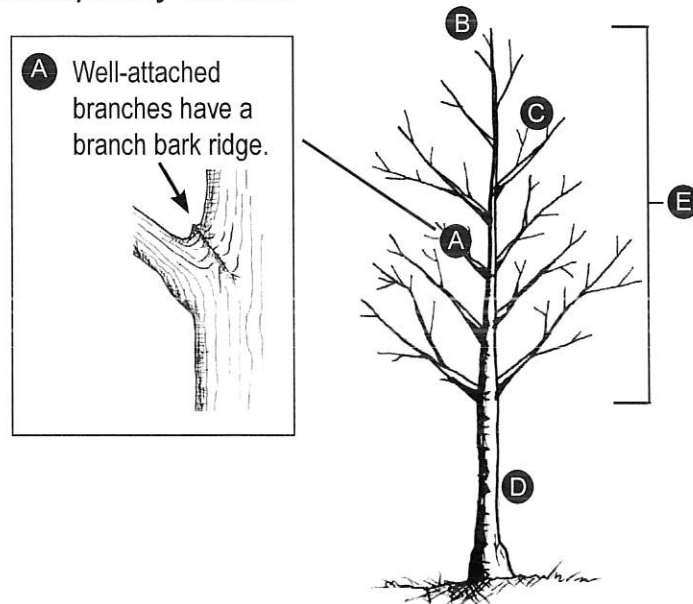
### D. Enough clearance between the ground and first branch

As a tree grows taller, branches remain at the same height. Branches located low on the trunk may get in the way of sidewalk paths or lawn mowing as the tree gets bigger. Over time, gradually remove low branches.

### E. Good crown height

The crown of a deciduous tree should be at least 60 percent of the total tree height.

 **Do not remove more than 25 percent of the tree's live branches (and therefore leaves) at any one time.**



\*Gilman, E. 2002. An illustrated guide to pruning, 2d ed. Albany, NY: Delmar Publishers. 330 p.

**Topping\*:** (Also called stubbing, heading, tipping, hat-racking, dehorning, or roundover)

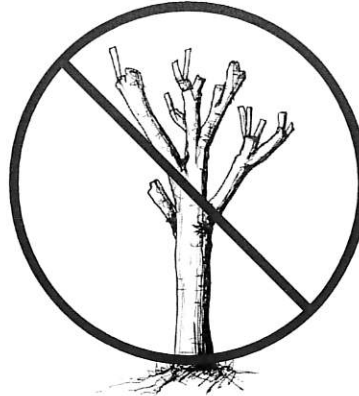


**Topping is not pruning.**

Topping is the indiscriminate removal of branch ends. Topping injures and ultimately results in early failure or death of a tree.



**TIP:** If the end of the branch must be removed, cut it back to a side branch that is at least one-third (preferably one-half) the diameter of the branch being cut.



Topped tree

**Myth:** Topping will make the tree easier to maintain.

**Truth:** Topped trees can regain their original height quickly, often in 2 years. A topped tree will require more attention than a properly pruned tree because of the fast growing, loosely attached shoots that form.



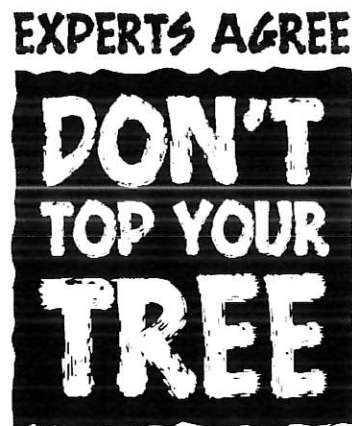
Topped tree with regrowth

**Myth:** Topping invigorates a tree.

**Truth:** Topping immediately injures a tree and starts it on a downward spiral. Topping wounds expose the tree to decay and invasion from insects and disease. While a tree may survive topping, its life span will be significantly reduced.

**Myth:** Topped trees will add value to your property.

**Truth:** Topped trees lack natural beauty and may actually reduce your property values. Also, a topped tree can become hazardous and cause property damage, making it a liability.



\*Adapted, with permission, from the "Experts Agree: Don't Top Your Tree" campaign which was developed by the Missouri Community Forestry Council and Forest ReLeaf of Missouri, with financial assistance currently provided by the Missouri Department of Conservation.

## PROTECTING TREES FROM CONSTRUCTION DAMAGE\*

Are you planning to build or remodel a home? Are you going to expand or pave your driveway? Are your city's streets, curbs, sidewalks, and buried utilities about to be widened, modernized, or replaced? Before construction begins, consider the impact on trees.

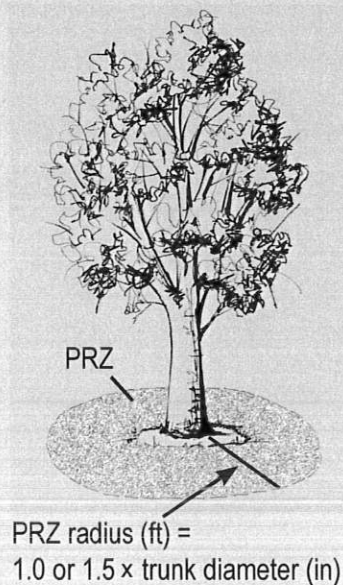
Careful tree protection will help you avoid the expense and heartache of later repairing or removing trees that were located too close to construction activities (see "How Close is Too Close?" below). Depending on the type of construction and proximity to trees, you may be able to protect the trees yourself, or it may be best to consult with an arborist to design, implement, and enforce a tree protection plan.

**⚠ Start planning early.** To minimize costs and increase the likelihood of successful tree preservation, start tree protection planning as soon as possible.

### How Close Is Too Close? Defining The Protected Root Zone (PRZ)

The tree's Protected Root Zone (PRZ) can be identified as follows:

1. Measure the diameter (width) of the trunk at chest height, to the nearest inch. To do this, either wrap a tape measure around the trunk and divide that number by 3 or hold a yard stick up to the trunk and approximate the distance.
2. Multiply that number by 1.5 for mature or stressed trees or by 1.0 for young, healthy trees. Express the result in feet.
3. Measure that distance from the trunk of the tree. The area within this radius is the Protected Root Zone (PRZ).

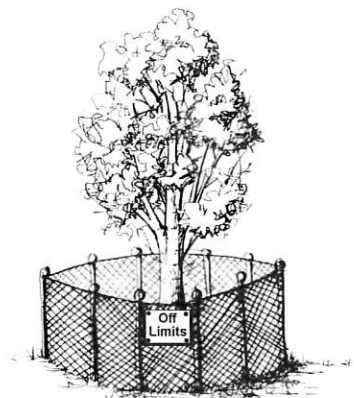


\*Adapted, with permission, from: Johnson, G. 1999. Protecting trees from construction damage: a homeowner's guide. St. Paul, MN: University of Minnesota Extension. 21 p.

The activities listed below all negatively impact tree roots. To protect your trees, define the Protected Root Zone (PRZ), and keep these activities away from this area, at a minimum.

### Storing Materials and Moving Equipment

Soil compaction is one of the main killers of urban trees. Stockpiling building materials, using heavy machinery, and excessive foot traffic all compact the soil. To minimize damage, install orange polypropylene or chain link fencing and post "Off Limits" signs around the PRZ of the trees you plan to save. Check the fence often to be sure that it is still intact and serving as a barrier.



### Changing the Grade

Adding or removing as little as 2 inches of soil in the PRZ can kill a tree. To minimize damage, consult an arborist about methods to protect the roots if fill needs to be added or soil needs to be removed within the PRZ.

### Excavating

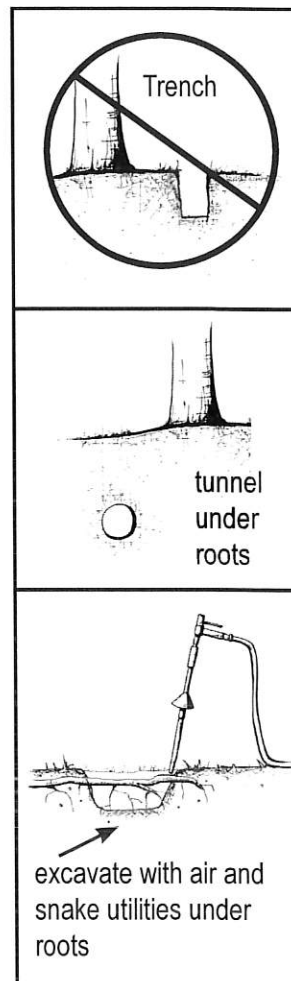
If utility or irrigation lines cannot be relocated outside the tree's PRZ, reduce root damage by requiring tunneling under the tree's root system (instead of trenching through it). Specialized equipment that blows soil away from the roots using compressed air allows utilities to be placed with very little root damage. Otherwise soil tunneling equipment can be used, reducing root damage by up to 25 percent compared with trenching.

For all digging operations, insist that exposed roots be cut cleanly to promote quick wound closure and regeneration. Vibratory plows, chain trenchers, stump grinders, and hand tools do a better job at this than bulldozers and backhoes.

Avoid excavating during hot, dry weather; keep the plants well watered before and after digging; and cover exposed roots with soil, mulch, or damp burlap as soon as possible.

### Paving

To minimize damage, keep walkways at least 3 feet from the anticipated mature trunk.



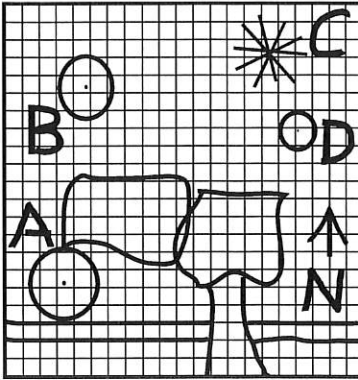
## RECORD OF TREE TYPES AND LOCATIONS

Use this space to keep a record of trees planted on your property. Map tree locations on p. 27.

[illegible]

Sketch the location of your house and all trees on your property. Label each tree with a letter (A, B, C, etc.) to match the record on the opposite page (use a pencil to draw). Each square can represent 2, 5, or 10 feet, depending on the size of your yard.

**Sample:**



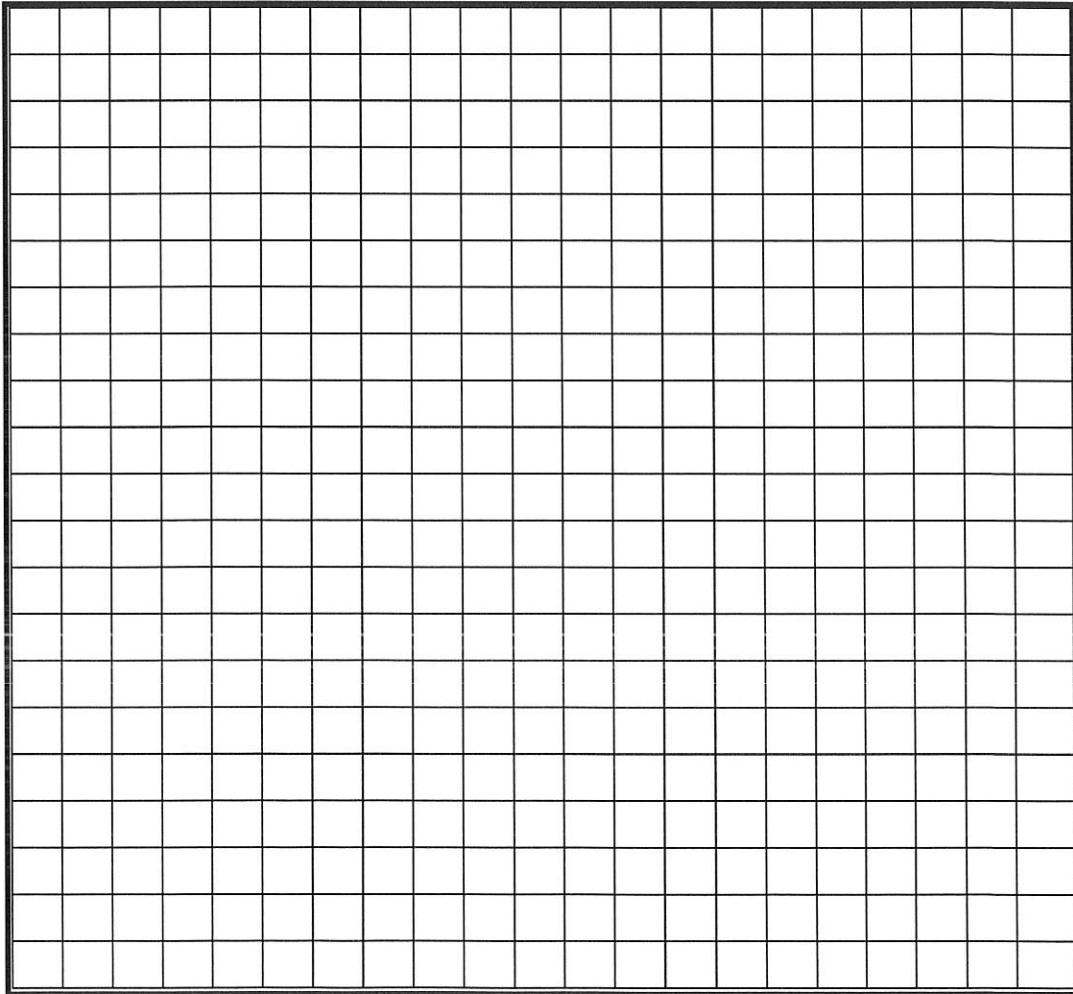
**Key:**



Deciduous



Evergreen



## SERVICE AND REPAIR

### How to Hire an Arborist\*

You can find arborists listed in the phone directory, usually under "Tree Service." When selecting an arborist, look for the following qualifications:

- ☐ **Education** (degree in arboriculture, urban forestry, forestry, horticulture)
- ☐ **Membership in Professional Organization(s)**  
Organizations include the International Society of Arboriculture (ISA), Tree Care Industry Association (TCIA), American Society of Consulting Arborists (ASCA), and your state's arborist association. Such membership demonstrates a willingness to stay current on techniques and information.
- ☐ **ISA Certification or State Certification/License**  
Certified or State-licensed arborists are experienced professionals who have passed an examination and meet requirements for on-going education.
- ☐ **Proof of Insurance**  
A reputable arborist carries personal and property damage insurance (\$1 million per occurrence, \$2 million aggregate) and worker's compensation insurance (\$1 million). If an arborist is uninsured, homeowners could be held responsible for damages and injuries that occur as a result of the tree work. Request certificates, and phone the insurance agency to verify. Ask if the entire job will be performed by employees of the tree care company bidding the job. If not, ask for insurance certificates from all independent contractors as well.
- ☐ **Necessary Permits and Licenses**  
Some governmental agencies require contractors to apply for permits, a license, or both, before they are able to work. Be sure contractors comply with any local, state, provincial, or national laws.

#### Other Advice

- **Ask for references and speak to former clients.**
- **Get more than one estimate.**
- **Do not automatically accept the lowest bid.**
- **Never pay in advance.**
- **Be wary of door-to-door sales.** These are especially common after storms. Know that good arborists perform only accepted practices and wear safety equipment. For example, topping a tree and using climbing spikes for pruning are unacceptable. Safety equipment includes hard hats and ear protection.
- **Get it in writing.** When will the work be started and completed? Who will be responsible for clean-up? What is the hourly rate for additional work?

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\*Adapted, with permission, from: International Society of Arboriculture. 2004. Why hire an arborist? Champaign, IL. 4p.

## Record of Service

Record work completed on your trees. Use the tree letter from the record on page 27.

| Tree ID | Date: | Type of Maintenance Completed: | Work Performed By: | Date of Next Service: |
|---------|-------|--------------------------------|--------------------|-----------------------|
|         |       |                                |                    |                       |
|         |       |                                |                    |                       |
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## TROUBLESHOOTING

| If you see:                                                        | Potential cause:                                                                                   | You should:                                                           |
|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| <b>TRUNK</b>                                                       |                                                                                                    |                                                                       |
| A flat-sided trunk at the base of the tree                         | Encircling root restricting the flow of water and nutrients between the roots and rest of the tree | Excavate to check for encircling root (see p. 15)                     |
| Bark damage near the bottom of the tree                            | Rodent or string trimmer                                                                           | Apply mulch/trunk guard to protect from future damage (see p. 14, 16) |
| An elm tree with liquid oozing from the trunk                      | Slime flux or wetwood                                                                              | Not worry about health                                                |
| <b>BRANCHES</b>                                                    |                                                                                                    |                                                                       |
| An elm tree with bright yellow leaves on one or two branches       | Dutch elm disease                                                                                  | Immediately call the University* or an arborist                       |
| Webs in the branches or webs covering the tips of branches         | Fall webworm or Eastern tent caterpillar                                                           | Not worry about health                                                |
| Many branch tips snapped off and laying on the ground              | Squirrel damage                                                                                    | Not worry about health                                                |
| Black clumps on branches of a cherry tree                          | Black knot                                                                                         | Call for advice*                                                      |
| Very little growth                                                 | Many                                                                                               | Call for advice*                                                      |
| Hole in trunk or branches                                          | Many                                                                                               | Call for advice*                                                      |
| <b>LEAVES</b>                                                      |                                                                                                    |                                                                       |
| Leaves sticky and covered with a black velvety coating (like soot) | Piercing, sucking insect and sooty mold                                                            | Not worry. Hose down the leaves to get rid of sap.                    |
| Leaves wilted                                                      | Many                                                                                               | Call for advice*                                                      |
| Spots on leaves                                                    | Many                                                                                               | Call for advice*                                                      |
| Small leaves                                                       | Many                                                                                               | Call for advice*                                                      |
| Sparse leaves                                                      | Many                                                                                               | Call for advice*                                                      |
| Yellow or brown leaves                                             | Many                                                                                               | Call for advice*                                                      |
| Holes in leaves                                                    | Insect feeding                                                                                     | Not worry about health                                                |
| Bumps on leaves                                                    | Many                                                                                               | Not worry about health                                                |

\*Call an arborist or your University plant diagnostic service (next page).

## OTHER SOURCES OF HELP

Arborists can provide good information about the health of your tree, and many communities have city foresters that may be of assistance. In addition, every land grant university has a service for answering tree health questions (see phone numbers listed below). For Web links, visit [www.nepdn.org](http://www.nepdn.org) if in the Northeastern United States or [www.ncpdn.org](http://www.ncpdn.org) if in the North-Central United States.

Connecticut (University of)  
(877) 486-6271

Missouri (University of)  
(573) 882-3019

Delaware (University of)  
(302) 831-1390

New Hampshire (University of)  
(603) 862-3200

Illinois (University of)  
(217) 333-0519

New Jersey (Rutgers University)  
(732) 932-9140

Indiana (Purdue University)  
(765) 494-7071

New York (Cornell University)  
(607) 255-7850

Iowa (Iowa State University)  
(515) 294-0581

Ohio (Ohio State University)  
(614) 292-5006

Maine (University of)  
(800) 287-0279

Pennsylvania (Penn State University)  
(814) 865-2204

Maryland (University of)  
(800) 342-2507

Rhode Island (University of)  
(401) 874-2900

Massachusetts (University of)  
(413) 545-3208

Vermont (University of)  
(802) 656-0493

Michigan (Michigan State University)  
(517) 355-4536

West Virginia (University of)  
(304) 293-6023

Minnesota (University of)  
(612) 624-3020 or (612) 625-1275

Wisconsin (University of)  
(608) 262-2863

## IN THE EVENT OF AN EMERGENCY

### **Large branch or tree on the ground**

If it is near a downed utility line, do not go near the tree! Call the utility company. If it is in the street, contact the city. If it is in your yard, call an arborist to have it removed.

### **Tree or branches on utility line**

Stay away from the tree! Call your utility company.

### **Branches broken, still hanging in the crown**

Call an arborist (p. 28) to have the “hangers” removed, and make clean cuts at a lateral branch or bud (p. 2, 19).

### **Ice coating and weighting the branches**

Stay in a protected area, out from underneath the branches. Some limbs may break. Once the ice is gone, check for safety (p. 17), and call an arborist if necessary. Many branches return to their original state after severe bending.

### **Tree hit by vehicle**

If possible, get the license plate number, name, and insurance information of the driver. Document the tree's injuries with photographs. Contact an arborist to evaluate the damage (p. 28).

### **Wounded trunk**

Use a scissors or hand pruner (p. 19) to cut off any loose bark. Monitor health (p. 17). Do not apply “wound paint.”

### **Chemical spill around tree**

Call an arborist (p. 28), asking for someone with experience in soil contamination.

### **Root severed**

Photograph and call an arborist to assess safety and make treatments as necessary.

### **Flooding**

Monitor the trunk to see if it begins to lean in one direction. Check the ground area around the roots to see if the soil or grass has lifted. If so, contact an arborist right away for a safety assessment. Monitor the tree's health over time (p. 17). It may take a year or more for symptoms to appear.

### **Lightning or storm damage**

Call an arborist to assess safety and make necessary treatments.

### **Trunk nicked by lawn care equipment (weed trimmer or lawn mower)**

Stop doing that! Create a mulch ring around the tree to eliminate grass (p. 16), or use a trunk protector (p. 14).

## REMOVAL AND DISPOSAL

### Whole Tree



#### **Electricity flows through branches.**

If the tree or branches are within 10 feet of utility lines, contact your local utility company for information on assistance in removal.

To remove a large tree, hire an arborist. If you are interested in having the tree milled into lumber, visit [www.harvestingurbantimber.com](http://www.harvestingurbantimber.com) to find someone with a portable mill in your area. You may also try contacting local woodworkers and technical schools to see if they would like the wood.

#### **Disposing of debris:**

Option 1: The arborist can remove the wood for you.

Option 2: If you or someone you know could use the tree for firewood, ask the arborist to cut and leave the wood for you in moveable chunks. If you do not know anyone who needs firewood, consider advertising it on community bulletin boards (e.g., at local grocery stores).



#### **Insects and diseases are hitch hikers.**

Many insects and diseases can be spread by moving firewood. To be safe, do not transport firewood to another town.

### Trimming

Check with your city or town for compost sites that accept tree branches and leaves.

### Leaves

If you live in the city, keep leaves out of the street to avoid clogging storm sewers and polluting water (nutrients from leaves get leached into the storm drains, which typically lead directly to lakes and rivers). Leaves can be used as mulch around your trees and in your garden beds or taken to your city's compost site. Check with your city to find out if they will collect leaves left on the curb in the autumn.

# BUYING A NEW TREE

## Decide on the type of tree



**TIP:** Visit <http://orb.at.ufl.edu/TREES/> to find trees that will fit your site.

Check for aboveground and belowground conflicts (p. 4-5). Then examine these important factors:

### Location

If within 25 feet of overhead utility wires, choose a tree that will not get taller than 30 feet.

### Cold Hardiness

Find your cold hardiness zone by contacting the University Extension Service, garden center, or at: [www.usna.usda.gov/Hardzone](http://www.usna.usda.gov/Hardzone). Select a tree with a number the same or less than your zone.

### Soil Drainage

Check how quickly water soaks into the ground by digging a hole 18 inches deep and filling it with water. Let it drain completely. Refill it with water, and time how long it takes for the water to drain.

Less than 2 hours = Very Fast  
18 hours or more = Very Slow

### Soil pH

Use a pH meter (for sale at garden centers) or get a soil test (contact University Extension Services).

### Sun Exposure

Is the area mostly sunny, mostly shady, or partly sunny?

Fill out the following worksheet to help choose a tree for your site.

Cold Hardiness Zone (write in)

\_\_\_\_\_

Soil Drainage (circle one):



Very fast

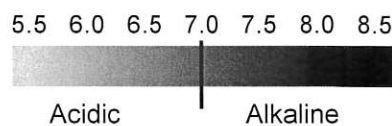


Medium



Very slow

Soil pH (circle one):



Sun Exposure (circle one):



Mostly sunny



Morning or afternoon sun



Mostly shady

Desired tree features (check all):

- |                                            |                                        |
|--------------------------------------------|----------------------------------------|
| <input type="checkbox"/> Spring flowers    | <input type="checkbox"/> Provide shade |
| <input type="checkbox"/> Summer flowers    | <input type="checkbox"/> Short         |
| <input type="checkbox"/> Autumn leaf color | <input type="checkbox"/> Medium        |
| <input type="checkbox"/> Attract birds     | <input type="checkbox"/> Tall          |
| <input type="checkbox"/> No messy fruit    |                                        |

## Select a high quality tree at the nursery

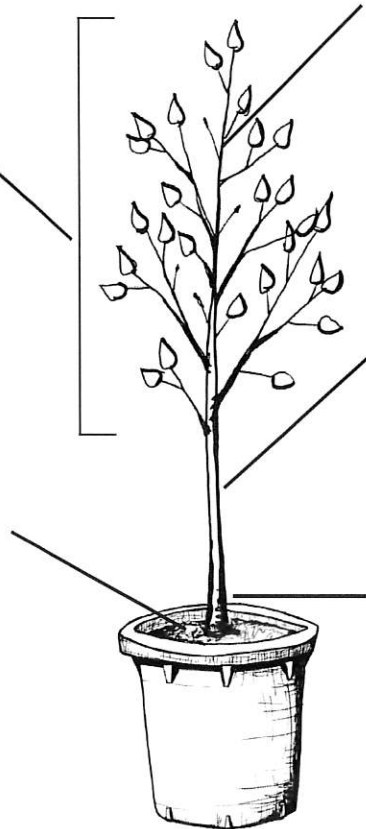
Crown height should be at least 60 percent of the total tree height for deciduous trees, 75 percent for evergreens.

One central leader is ideal. If not present, make sure that it can easily be pruned to one leader.

The bark should be free of scrapes or cracks (remove trunk wrap to check underneath).

There should not be more than 4 inches of soil over the roots. Use a metal kabob skewer or other heavy wire to push through the soil to find the depth to the first roots (roots that are at least as big around as a pencil).

The trunk should be centered in the soil and should not move independently of the root ball.



## ADDITIONAL SOURCES OF INFORMATION

Tree Owner's Manual Web site  
Your State Forestry Agency  
International Society of Arboriculture  
TreeLink  
American Forests  
National Arbor Day Foundation  
Tree Care Industry Association  
Forest Service

[www.treeownersmanual.info](http://www.treeownersmanual.info)  
[www.stateforesters.org/SFlist.html](http://www.stateforesters.org/SFlist.html)  
[www.treesaregood.org](http://www.treesaregood.org)  
[www.treelink.org](http://www.treelink.org)  
[www.americanforests.org](http://www.americanforests.org)  
[www.arborday.org](http://www.arborday.org)  
[www.treecareindustry.org](http://www.treecareindustry.org)  
[www.na.fs.fed.us/urban](http://www.na.fs.fed.us/urban)

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## TRANSPORTING YOUR TREE

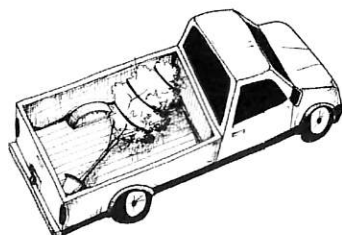
Moving your tree is easiest if the branches are tied.

Do not lift by the trunk if the roots are packaged with soil in a container or burlap. Instead, lift the root ball (see the sidebar on How to Move Your Tree, p. 6).

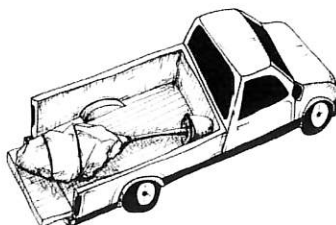
If your tree has leaves and will be sticking out the back of a vehicle, the crown should be wrapped with a sheet, tarp, or burlap.

 **Wrap branches with a sheet or tarp!**

Tree fits in bed



Tree hangs out back of vehicle



## STORING YOUR TREE UNTIL PLANTING

Keep the soil around the roots moist to the touch. Store in a shady spot.

For bare root trees, pack wet newspapers, sawdust, or mulch around the roots, and wrap them in a big plastic bag. Plant the tree as soon as possible (within 2 days). The biggest risk to bare root trees is the roots drying out.

For balled-and-burlapped or containerized trees, if you cannot plant the tree within 24 hours, water the roots well and either cover the entire root ball with mulch or wrap the root ball in plastic or a tarp. Keep the soil moist to the touch.



**Before you leave the Nursery or Garden Center, write down:**

- Where tree was purchased
- Date of purchase
- Warranty period (years)
- Type of tree (species)
- Mature height and width



# The City of Cedar Hills

|              |                                |
|--------------|--------------------------------|
| <b>TO:</b>   | Mayor and City Council         |
| <b>FROM:</b> | Chandler Goodwin, City Manager |
| <b>DATE:</b> | September 17, 2024             |

|                                |                                                                |
|--------------------------------|----------------------------------------------------------------|
| <b>SUBJECT:</b>                | Discussion on regulating residential sport courts and lighting |
| <b>APPLICANT PRESENTATION:</b> | N/A                                                            |
| <b>STAFF PRESENTATION:</b>     | Chandler Goodwin, City Manager                                 |

**BACKGROUND AND FINDINGS:**

Councilmember Smith has asked that this be a discussion item at this council meeting. The current process in Cedar Hills does not require a permit for any flatwork. This will include driveways, RV pads, basketball and other sports courts. While building code requires that all structures must receive a permit prior to construction, staff has not considered the installation of flatwork as a structure. Resident's who are concerned about the installation of a sport court in a neighboring yard are typically concerned about the nuisance element that might be associated with the use of a sport court, not necessarily the location. City Council must decide if this is something that merits further consideration and the possible adoption of additional code, and if that code is related to the installation of the court or the possible nuisance emanating from its use.

Another issue that results from the installation of a sport court is the use of lighting that would allow play at night. Staff has provided examples of neighboring city codes that address this nuisance. Staff will discuss this item with the City Council, gather feedback and bring the item to the Planning Commission.

**PREVIOUS LEGISLATIVE ACTION:**

N/A

**FISCAL IMPACT:**

N/A

**SUPPORTING DOCUMENTS:**

Sport courts and lighting document

**RECOMMENDATION:**

Staff recommends that the City Council not adopt regulations requiring permits for flatwork installation.

**MOTION:**

No motion necessary, discussion item only.

**ACTION:**

Motion:

Second:

Laura Ellison: Yes\_\_ No\_\_ Abstain\_\_ Absent\_\_

Mike Geddes: Yes\_\_ No\_\_ Abstain\_\_ Absent\_\_

Bob Morgan: Yes\_\_ No\_\_ Abstain\_\_ Absent\_\_

Erika Price: Yes\_\_ No\_\_ Abstain\_\_ Absent\_\_

Kelly Smith: Yes\_\_ No\_\_ Abstain\_\_ Absent\_\_

# SPORTS COURT REQUIREMENTS IN RESIDENTIAL ZONES

## LINDON CITY:

1. *Sport Courts.* Outdoor sport courts are permitted when in compliance with the following conditions:
  - a. Lighting of sport courts shall be contained within the sport court boundaries and shall not be directed onto another's property.
  - b. Sport court fencing shall not be taller than twelve feet (12').
  - c. Sport court fencing when taller than seven feet (7') shall maintain a minimum ten-foot (10') setback from rear and side yard property lines. Any sight obscuring materials used on such fencing shall be maintained and kept in good repair. Sport court fencing shall not be allowed in the required thirty-foot (30') front yard setback.
  - d. The planning commission may modify the height of sport court fencing to be taller than twelve feet (12') and the setback requirement to be less than ten feet (10') when the following findings are made:
    - i. The proposed height and/or setback modification is necessary to provide privacy and protection of private property interests.
    - ii. The appearance and/or setback of the fence will not detract or cause aesthetic damage to neighboring property owners.
    - iii. The proposed height and/or setback modification will not cause a public safety hazard.
    - iv. The proposed additional height is necessary to provide an adequate buffer for the adjoining landowners' use. (Ord. 2023-14 §2, amended, 2023; Ord. 2009-3, amended, 2009; Ord. 2003-15, amended, 2003)

## Plain City, UT

- B. Tennis Court, Private: No tennis court shall be allowed in any zoning district except as an accessory use and unless it complies with the following conditions and requirements:
  1. It is an accessory use to main building and is located within the side or rear yard thereof;
  2. It is intended and is to be used solely for the enjoyment of the occupants and guest of the principal use of the property on which it is located;

3. It may not be located closer than six feet (6') to any property line of the property on which it is located. It shall not be less than thirty feet (30') from any neighbor's dwelling or twenty feet (20') from any side lot line of any adjacent vacant lot;

4. On a corner lot where the rear lot line is coterminous with a side lot line of an adjoining lot, it shall be located not less than twenty five feet (25') from such lot line, any neighbors' nonlivable area, which includes, but is not limited to, the garage, carport, or storage areas;

5. Any court lighting shall be installed and directed such that the light source or light bulb is not directly visible from any point five feet (5') high along the neighboring property line.

C. Basketball Standard And Court, Private: A single basketball standard and court shall not be considered a structure or accessory structure in any residential zoning district. The placement of a basketball standard or court shall be in accordance with the following requirements:

1. A light erected in conjunction with the basketball standard or court shall be installed and directed such that the light source or light bulb is not directly visible from any point five feet (5') high along the neighboring property line; and

2. A net or other portable device may be erected up to thirteen feet (13') in height behind the basketball standard to protect the ball from falling onto the adjacent property. (Ord. 2016-02, 5-5-2016, eff. 5-5-2016; amd. Ord. 2024-05, 6-6-2024)

#### Farmington, UT:

C. Private Multipurpose Sports Courts: Private multipurpose sports courts, tennis courts or other similar playing surfaces, shall be set back at least five feet (5') from the rear and side property lines, fifteen feet (15') from the side corner property line, at least thirty feet (30') from the front property line, and shall be at least twenty feet (20') from any neighboring dwelling. Any deviation from the above setbacks or fence standards contained in this title shall require a special exception (no fee shall be assessed for such application). No lighting may be installed in connection with the multipurpose sports court, tennis court or other similar playing surface which shall throw any direct rays beyond the property lines on which it is constructed. (Ord. 1997-26, 6-4-1997; amd. Ord. 2011-10, 5-17-2011; Ord. 2015-25, 8-4-2015; Ord. 2021-01, 1-19-2021; Ord. 2024-39, 7-2-2024)

**ALPINE CITY: Sports Courts.** All sports courts shall be located in accordance with the setbacks outlined below. Sports courts shall not be permitted in a recorded easement. Setbacks are measured from the nearest edge of the court to the property line.

1. Front Setback. Sports courts shall be set back not less than forty (40) feet from the front property line.
2. Side Setback – Corner Lot, Side Abutting a Street. Sports courts shall be set back not less than ten (10) feet from the side lot line which abuts on a street.
3. Side and Rear Setback - Interior Lot Line. Sports courts shall be set back not less than ten (10) feet from the side or rear lot line.
4. The Planning Commission may grant an exception to the front yard or side yard setback to locate a sports court on a lot with three sides where the longest side abuts a street, subject to the following requirements.
  1. The sports will be no closer than ten feet (10') to the property line abutting the street;
  2. No part of the court shall be located in any designated easement.
  3. The sports court may not be located closer than thirty feet (30') from any dwelling on adjacent neighboring property.
  4. A privacy fence shall be installed so that the sports court (excluding light poles) is not visible from the street, subject to any clear view requirements as determined by the city engineer.

**Conditional Uses for Interior Fences.** A conditional use permit may be approved by the City Planner for an interior fence over eight (8) feet in height for such things as sports courts, gardens and swimming pools. A conditionally approved interior fence shall not exceed twelve (12) feet in height and shall be an open style fence. (Ord. No. 2015-06, 05/26/15)

1. **ALPINE: LIGHTING: Outdoor Lighting.**
  1. **Outdoor Recreation Areas.** All lighting shall be shielded and directed to illuminate only the areas in use. Light Trespass onto an adjacent property or public right of way is prohibited. Lighting is permitted from 7:00 am to 11:00 p.m., or 30 minutes after use of the Outdoor Recreation Area ceases, whichever is earlier.
  2. **Home and Landscape Lighting.** All lighting shall be shielded and directed to illuminate only the areas in use. Light Trespass onto an adjacent property or public right of way is prohibited
  - 3.



4.

#### HIGHLAND: LIGHTING NUISANCE

Lighting. For the purpose of this chapter, lighting shall be defined to be the artificial illumination of school athletic fields and commercial parking lots, but shall not include residential or municipal street lights. It is unlawful for any person, organization, association, or group to create or permit any outdoor, artificially created light to reflect on any adjacent residential property located within one thousand feet of the source of light, between the hours of ten p.m. and seven a.m.

#### PLEASANT GROVE : LIGHTING:

##### 10-15-44: EXTERIOR LIGHTING:

The purpose of this section is to regulate the placement, aim, distribution patterns, fixture types and operation of outdoor lighting installed in the city. It is the intent of the city to encourage lighting that provides safety, utility and security. It is the intent of the city to protect the enjoyment of private property rights, and reduce atmospheric light pollution. It is the intent of the city to limit glare on public ways and private property by confining direct light (i.e., line of sight view of the lighting filament, element or source) to the premises.

##### A. General Provisions:

1. All outdoor lighting in nonresidential developments shall be turned off after business hours, except for essential security lighting.
  2. Electrical service to outdoor light fixtures shall be underground unless fixtures are mounted directly on buildings or public utility poles.
  3. Lights mounted to the exterior walls of buildings shall be aimed towards the building.
  4. Light fixtures shall be shielded type fixtures that are located, mounted and aimed to prevent direct light and glare from exceeding beyond the site's perimeter.
  5. Light fixtures on poles shall be installed at a maximum height of twenty feet (20') in residential zones unless otherwise provided for herein. Pole height shall not exceed the maximum allowed fixture height.
  6. Light fixtures designed as part of a larger improvement or development to portray a historic period or unique architectural style are encouraged where appropriate. Such fixtures are not required to be shielded, however, where nonshielded fixtures are used, the maximum lumens generated by each fixture shall not exceed two thousand (2,000) (equivalent to a 150 watt incandescent bulb). The height of such light fixtures shall not exceed twenty feet (20').
  7. Light fixture height shall be measured from the ground surface being illuminated to the bottom of the light fixture.
  8. Exterior lighting installed prior to the creation of this chapter shall be subject to the requirements of this chapter if, in the opinion of the community development director, that lighting creates a public nuisance or hazard.
  9. The community development director may find that exterior lighting is a public nuisance if such lighting is deemed by the public safety director to be a hazard to vehicular traffic.
  10. The community development director may find that exterior lighting is a public nuisance if direct light enters onto adjacent properties and is offensive to adjacent property owners, and such lighting is not exempt under subsection B of this section.
- B. Exemptions: The following types of outdoor lighting shall be exempt from the provisions of this section, except as specifically stated in this subsection:
1. Holiday lighting during the months of November, December and January, provided such lighting shall not create nuisance or hazardous, dangerous glare on adjacent streets, or nuisance glare on adjacent properties.
  2. Temporary lighting, including, but not limited to, circuses, fairs, carnivals and civic uses, for a period not to exceed fourteen (14) days, with the approval of the community development director. Requests for extensions of time may be approved by the community development director.
  3. Lighting necessary for permitted agricultural operations.

4. Construction or emergency lighting; provided, that such lighting is temporary and is discontinued immediately upon completion of the construction workday or abatement of the emergency circumstances necessitating such lighting.

5. Lighting for public streets.

6. Lighting for public facilities such as the city's recreation facilities (parks, softball fields, tennis courts, swimming pool, rodeo grounds, etc.), parking lots and buildings; and the Alpine School District schools, playing fields, parking lots, etc., except that such uses shall contain direct light to the premises.

7. Lighting for residences, except that said lighting shall not constitute a public nuisance.

Mapleton City:

**18.84.455: RESIDENTIAL LIGHTING:**

A. Lighting shall be shielded, recessed or directed downward to ensure that direct glare and reflections are contained within the boundaries of the parcel.

B. Free standing lights intended to illuminate outdoor recreation areas (i.e. sports court, riding arena, swimming pools, etc.) shall be turned off by no later than ten o'clock (10:00) p.m. daily.



# The City of Cedar Hills

|              |                                |
|--------------|--------------------------------|
| <b>TO:</b>   | Mayor and City Council         |
| <b>FROM:</b> | Chandler Goodwin, City Manager |
| <b>DATE:</b> | September 17, 2024             |

|                                |                                                                          |
|--------------------------------|--------------------------------------------------------------------------|
| <b>SUBJECT:</b>                | Discussion on security at the golf course and short course               |
| <b>APPLICANT PRESENTATION:</b> | N/A                                                                      |
| <b>STAFF PRESENTATION:</b>     | Chandler Goodwin, City Manager; Greg Gordon, Community Services Director |

**BACKGROUND AND FINDINGS:**

Currently, staff has no ability to monitor what is happening on the short course. In many instances, individuals will walk down to the short course without paying, and begin playing the course. Marshalls and other staff members have caught numerous individuals and have even trespassed individuals who have gone down to play after hours or when the course is closed. Staff is getting bids that would allow them to see a live feed of the short course from the pro shop. In this way, they will be able to see when people are down there and send a staff member to make sure that payment has been received prior to play.

Staff is also looking into a new camera to be mounted on a pole by hole one. This camera will allow staff to better see the locations of players on the course and know when to send new players out to tee off. Any purchase of a new camera system at the course will require a budget amendment.

**PREVIOUS LEGISLATIVE ACTION:**

N/A

**FISCAL IMPACT:**

TBD – Staff will have bids to consider as part of the meeting.

**SUPPORTING DOCUMENTS:**

N/A

**RECOMMENDATION:**

Staff recommends that the City Council consider the installation of cameras at the golf course that will allow staff to better monitor the short course as well as the front nine.

**MOTION:**

No motion necessary, discussion item only.

**ACTION:**

Motion:

Second:

Laura Ellison: Yes\_\_ No\_\_ Abstain\_\_ Absent\_\_

Mike Geddes: Yes\_\_ No\_\_ Abstain\_\_ Absent\_\_

Bob Morgan: Yes\_\_ No\_\_ Abstain\_\_ Absent\_\_

Erika Price: Yes\_\_ No\_\_ Abstain\_\_ Absent\_\_

Kelly Smith: Yes\_\_ No\_\_ Abstain\_\_ Absent\_\_