EXTERIOR CONSTRUCTION 101

2012 International Residential Building Code (2012 IRC)

SANDY SPRINGS™
GEORGIA

October 16, 2019

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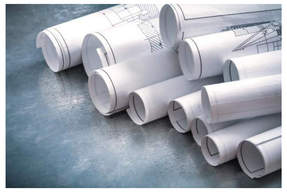
The “Process”

The Project "Process"

Begins with an Idea!



Create Drawings

Apply for Building Permit

Plan Review

Certificate of Completion

Get Permit

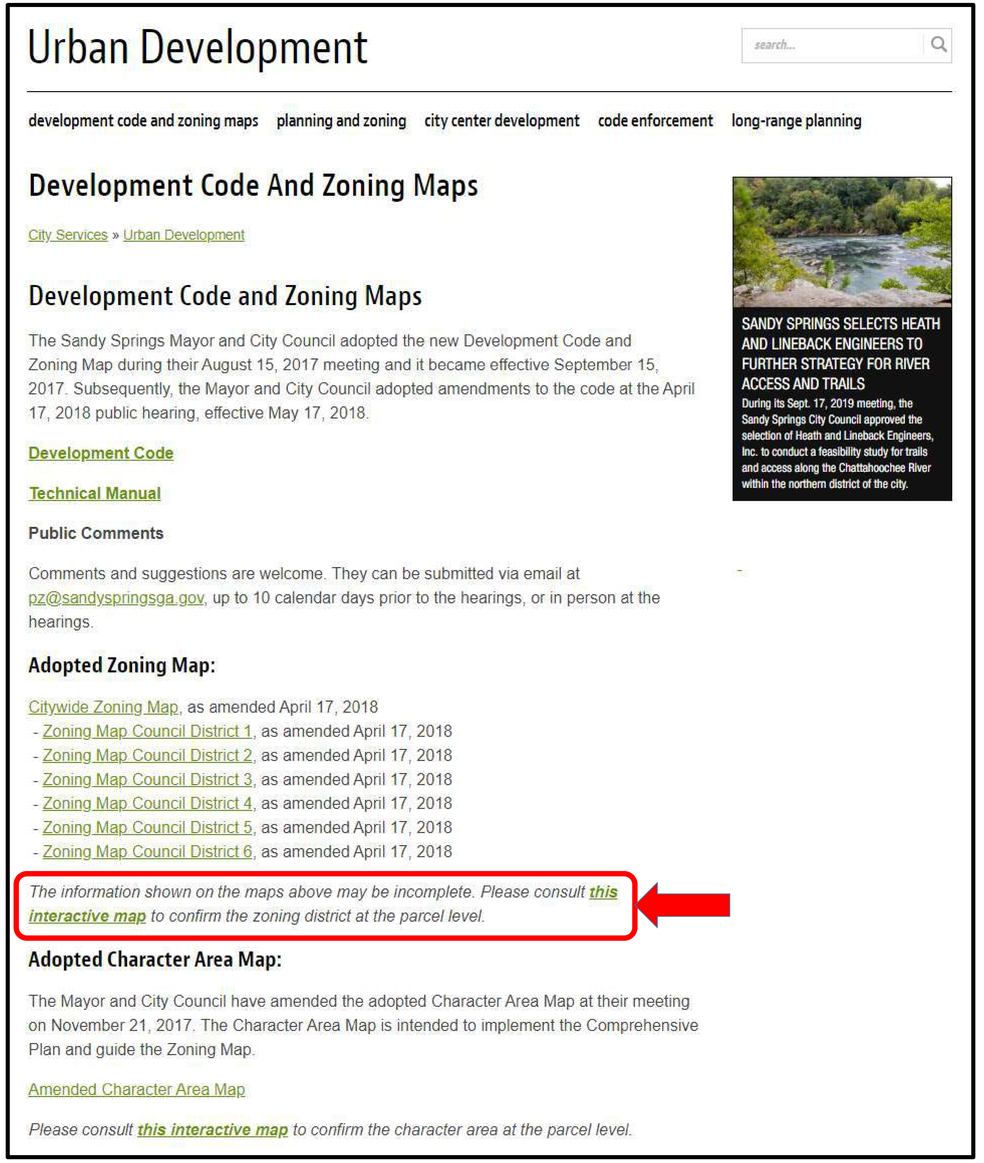
Construction

Inspections

What Design Parameters Do I Need To Know?

Step 1: Determine Your "Zoning District":

1. Call the City (770-730-5600) and ask the Planner of the Day.
2. Use the City's Community Development GIS found on the City's website: www.sandyspringsga.gov
   a) Navigate to "City Services" ➡ "Urban Development" ➡ "Development Code & Zoning"; *or*
   b) Use the quick link to the City's Urban Development Website: Spr.gs/devcode
3. Click on the "this interactive map" link.



Urban Development

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Development Code And Zoning Maps

City Services » Urban Development

Development Code and Zoning Maps

The Sandy Springs Mayor and City Council adopted the new Development Code and Zoning Map during their August 15, 2017 meeting and it became effective September 15, 2017. Subsequently, the Mayor and City Council adopted amendments to the code at the April 17, 2018 public hearing, effective May 17, 2018.

Development Code

Technical Manual

Public Comments

Comments and suggestions are welcome. They can be submitted via email at pz@sandyspringsga.gov, up to 10 calendar days prior to the hearings, or in person at the hearings.

Adopted Zoning Map:

Citywide Zoning Map, as amended April 17, 2018
- Zoning Map Council District 1, as amended April 17, 2018
- Zoning Map Council District 2, as amended April 17, 2018
- Zoning Map Council District 3, as amended April 17, 2018
- Zoning Map Council District 4, as amended April 17, 2018
- Zoning Map Council District 5, as amended April 17, 2018
- Zoning Map Council District 6, as amended April 17, 2018

*The information shown on the maps above may be incomplete. Please consult **this interactive map** to confirm the zoning district at the parcel level.*

Adopted Character Area Map:

The Mayor and City Council have amended the adopted Character Area Map at their meeting on November 21, 2017. The Character Area Map is intended to implement the Comprehensive Plan and guide the Zoning Map.

Amended Character Area Map

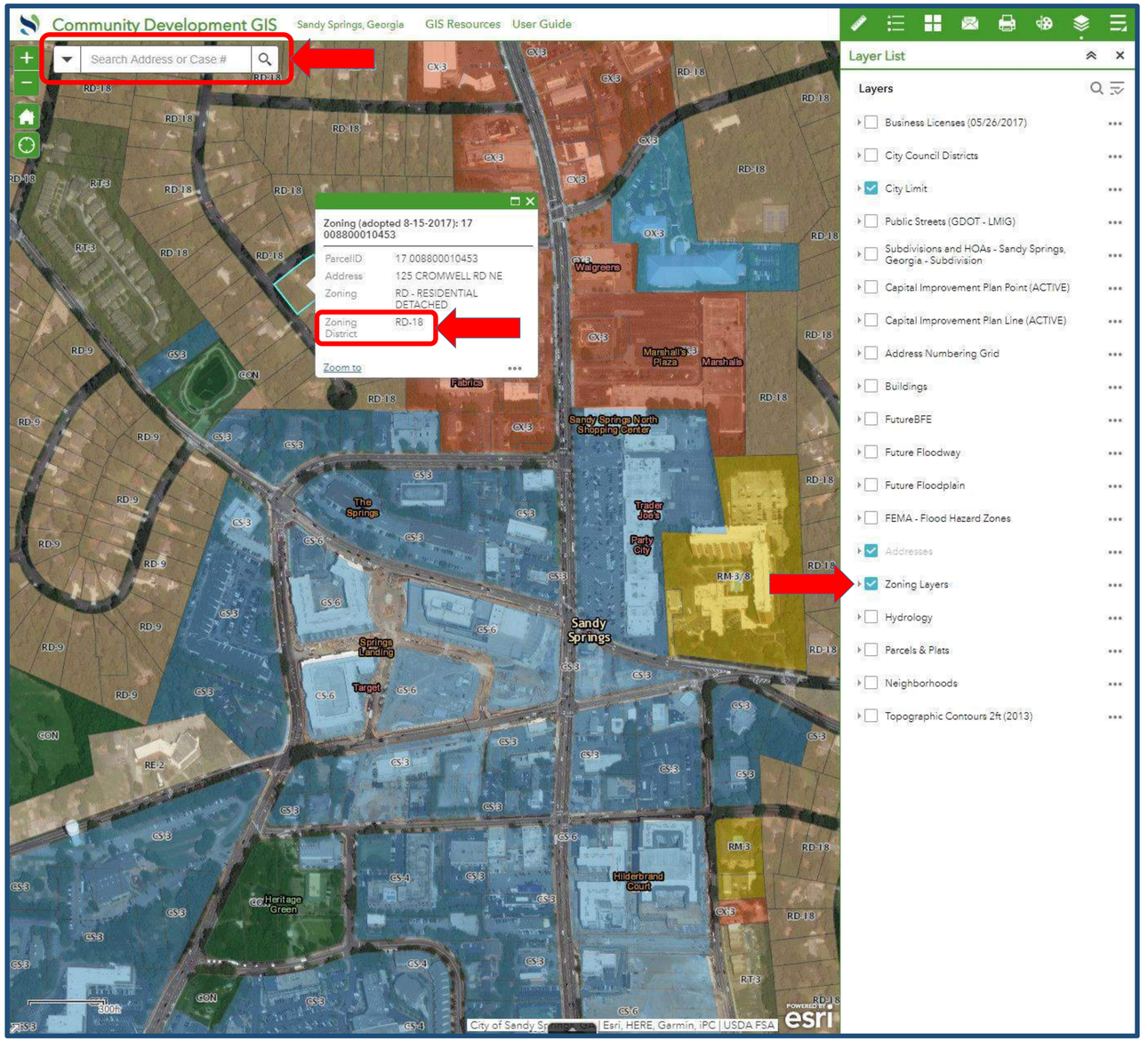
*Please consult **this interactive map** to confirm the character area at the parcel level.*

What Design Parameters Do I Need To Know?

Zoning District Example:

1. Make sure the "Zoning Layers" is turned on.
2. Search by Address (upper left corner) *or* by clicking on the specific lot.
3. Zoning districts are identified by the colored coded areas *or* identified in the pop-up window for the specific lot.

Example: 125 Cromwell Rd. is in a RD-18 Zoning District



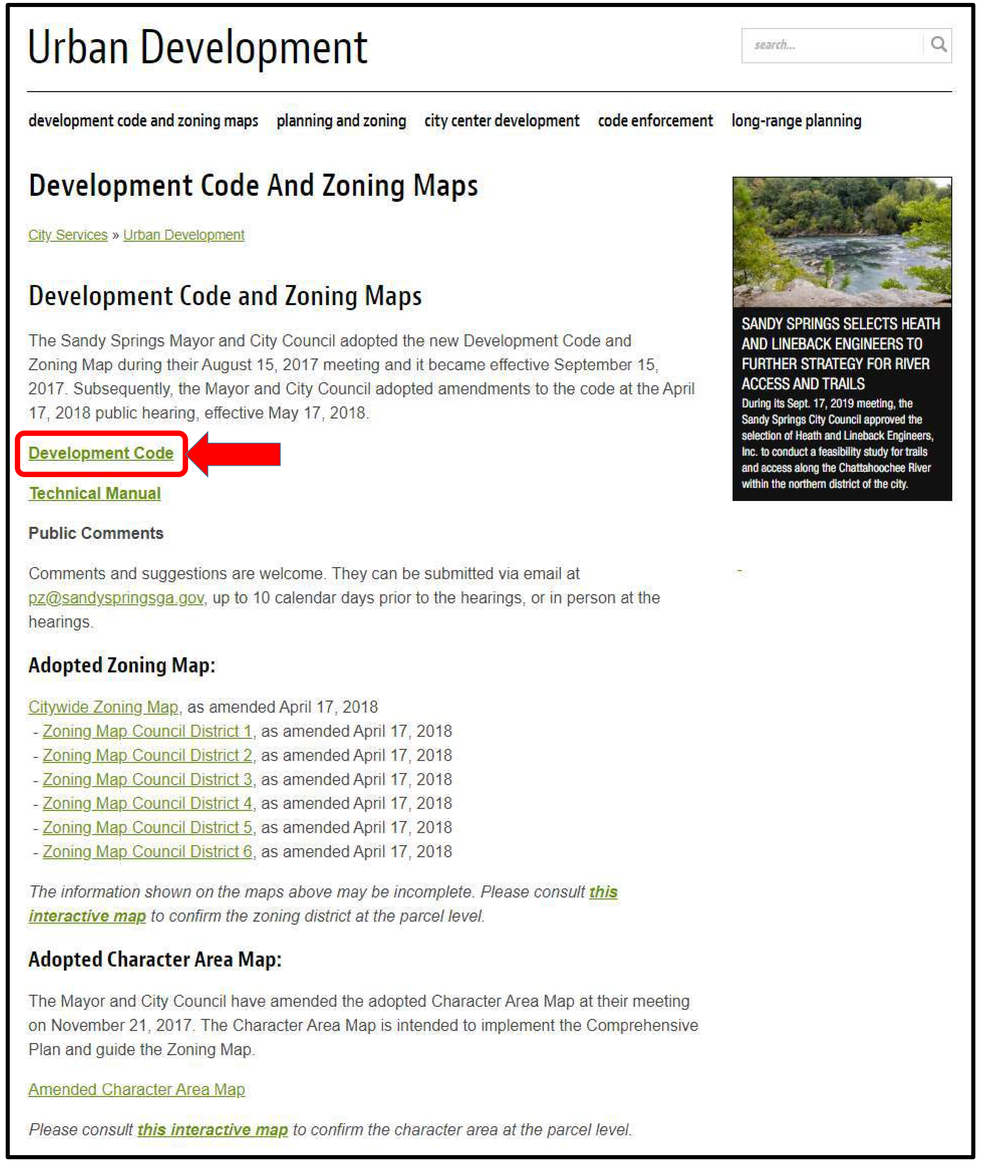
Zoning Certification Letter (ZCL)

- What information does a ZCL provide?
  - Zoning district designation
  - Zoning conditions
- How do I request a ZCL?
  - Submit a request letter to the Planning and Zoning Division
  - Include the address and a survey/Parcel ID #
  - Include a check for the $30 fee

What Design Parameters Do I Need To Know?

Step 2: Determine Your "Lot Parameters" and "Placement & Height":

1. Open the City's Development Code by clicking on the "Development Code" link found on the City's Urban Development website.
2. Once in the Development Code, navigate to your specific zoning district:
   - Article 2 – Protected Neighborhoods
   - Article 3 – Urban Neighborhoods
   - Article 4 – Corridors & Nodes
   - Article 5 – Perimeter Center



Urban Development

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Development Code And Zoning Maps

City Services » Urban Development

SANDY SPRINGS SELECTS HEATH AND LINEBACK ENGINEERS TO FURTHER STRATEGY FOR RIVER ACCESS AND TRAILS

During its Sept. 17, 2019 meeting, the Sandy Springs City Council approved the selection of Heath and Lineback Engineers, Inc. to conduct a feasibility study for trails and access along the Chattahoochee River within the northern district of the city.

Development Code and Zoning Maps

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Amended Character Area Map

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What Design Parameters Do I Need To Know?

Lot Parameters Example:

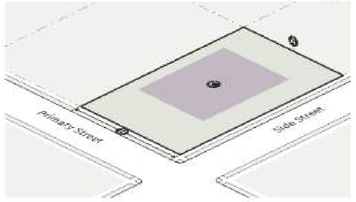
Assume Zoning District RD-18 (Section 2.3.1):

- Min Lot Area = 18,000 SF (single unit detached)
- Min Lot Width = 100 FT (single unit detached)
- Max Lot Coverage = 35% (residential use)
- Max Canopy Coverage = 35% (residential use)

Div. 2.3. - Residential Detached (RD-27, -18, -15)

Sec. 2.3.1. - Lot Parameters

SEC. 2.3.1. LOT PARAMETERS



		RD-27	RD-18	RD-15
Lot				
A	Area			
	Single unit detached	27,000 SF min	18,000 SF min	15,000 SF min
	All other allowed uses	10,000 SF min	10,000 SF min	10,000 SF min
B	Width			
	Single unit detached	120' min	100' min	90' min
	All other allowed uses	100' min	100' min	100' min
Coverage				
C	Lot coverage			
	Residential use	30% max	35% max	38% max
	All other principal uses		By use permit	
D	Canopy coverage			
	Residential use	35% min	35% min	35% min
	All other uses	40% min	40% min	40% min

What Design Parameters Do I Need To Know?

Placement and Height Example:

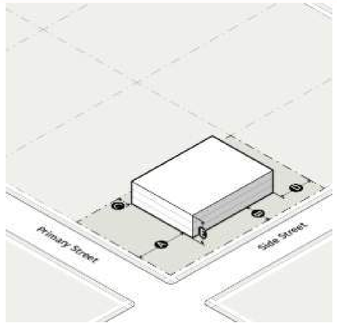
Assume Zoning District RD-18 (Section 2.3.2):

- Building Setbacks:
  - Primary Street = 50′ min
  - Side Street = 20′ min
  - Side (Common Lot Line) = 10′ min
  - Rear (Common Lot Line) = 35′ min
- Building Height = 3 stories / 40′ max

Div. 2.3. - Residential Detached (RD-27, -18, -15)

Sec. 2.3.2. - Placement and Height

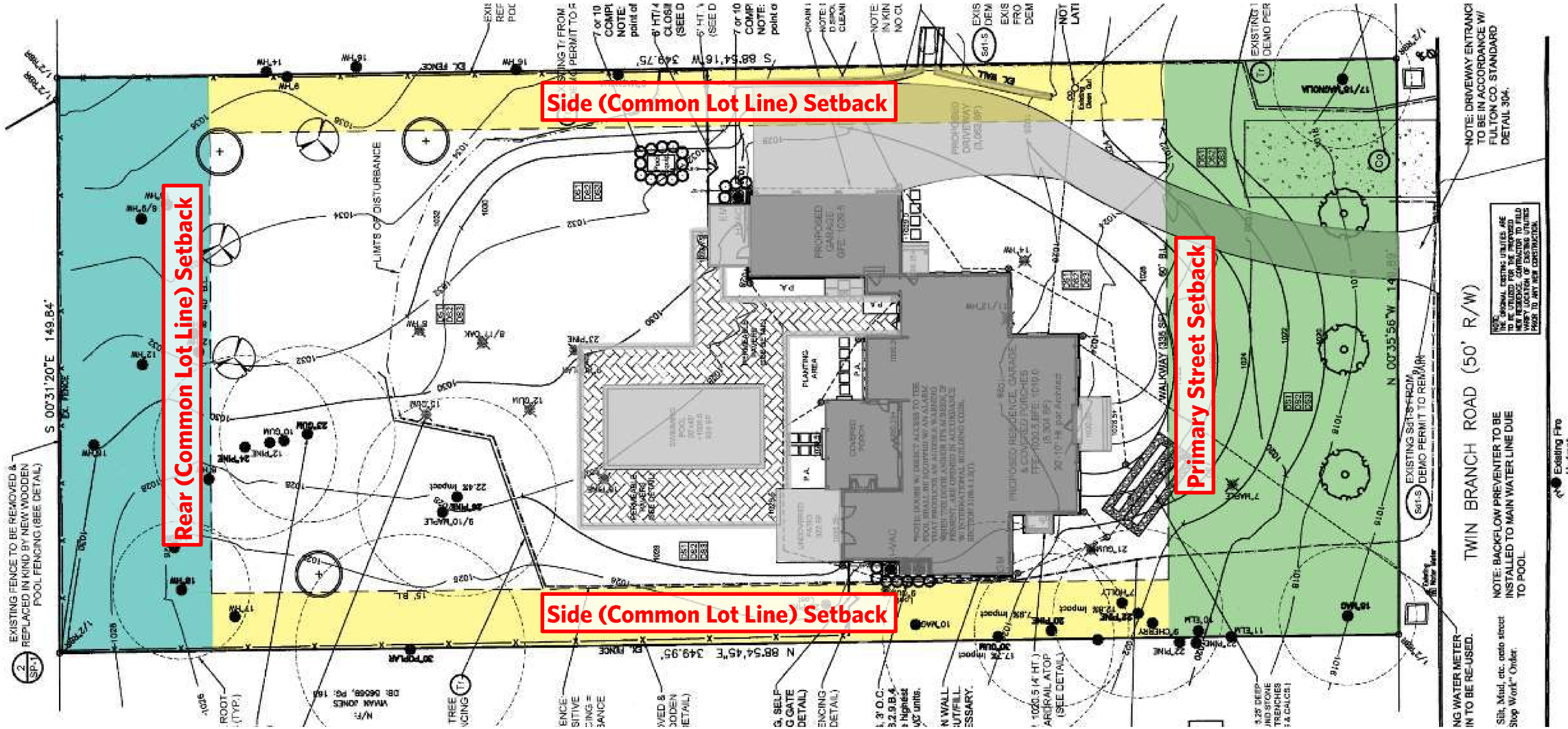
SEC. 2.3.2. PLACEMENT AND HEIGHT



		RD-27	RD-18	RD-15
Building Setbacks				
A	Primary street	60' min	50' min	Avg.*
B	Side street	30' min	20' min	20' min
C	Side: common lot line	15' min	10' min	10' min
D	Rear: common lot line	40' min	35' min	35' min
Building Height				
E	Single-unit detached dwelling		3 stories/40' max	
	All other principal uses		By use permit	

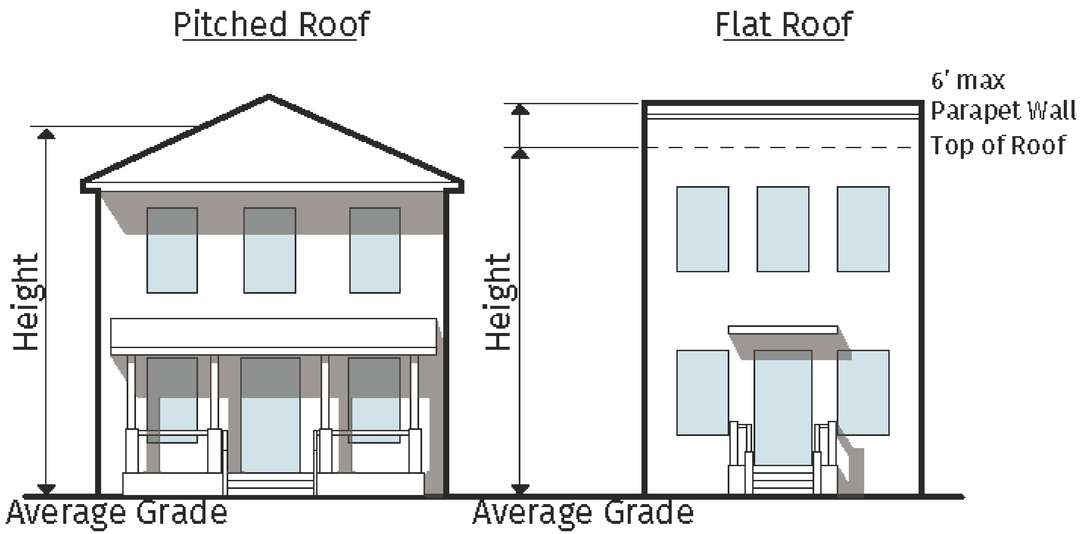
*Average front setback. Measured using 2 lots to either side of proposed site. New building must be no closer to the front lot line than the shallowest setback and no further than the deepest setback of the adjacent lots.

What Design Parameters Do I Need To Know?

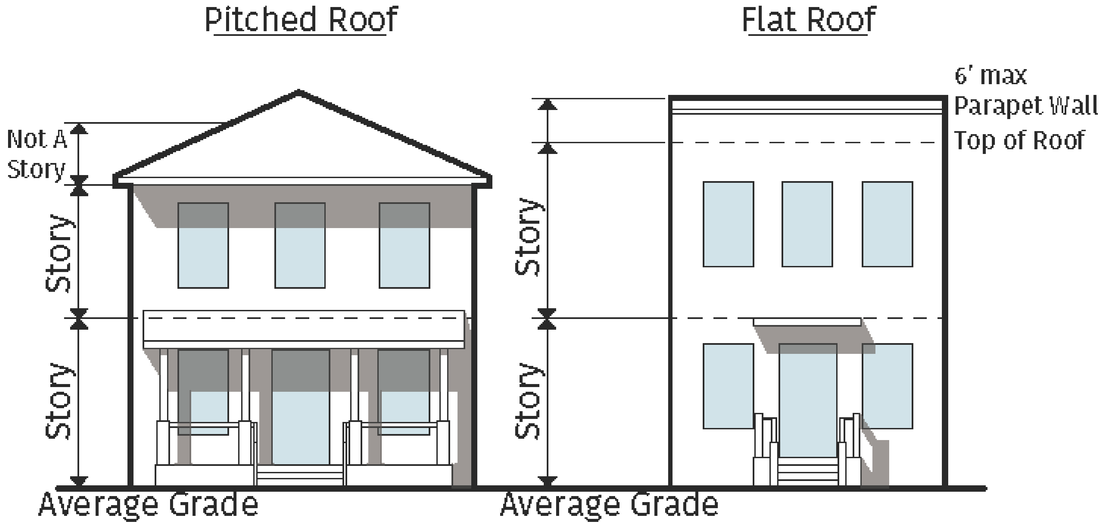


What Design Parameters Do I Need To Know?

- **Building Height** is measured from the average grade plane to the mean roof height of a pitched roof *or* the top of a parapet wall.



- Per the Building Official, a **Story** is classified as any level that has current or future habitable space regardless of the average grade plane.



Lot Coverage Requirement

- The Lot Coverage % is calculated by adding up the Total Square Footage of All Impervious Areas on any property divided by the Total Square Footage of the Property:

$$\text{Lot Coverage \%} = \frac{\text{Total Square Footage of All Impervious Areas}}{\text{Total Square Footage of Property}}$$

- Lot Coverage includes all of the following:
  a) The horizontal area of the building footprint measured within the outside of the exterior walls of the ground floor of all principal buildings and any roofed accessory building on the lot; and
  b) Any impervious parking areas, driveways, walkways, steps, terraces, uncovered patios and decks, swimming pools, and any similar features.

Lot Coverage Requirement

- 100% area credit will be given for pervious pavers if you use the City of Sandy Springs pervious paver detail.
- 50% area credit will be given for pervious concrete.
- Other materials will be evaluated upon request.
- In RE- and RD- districts, the base maximum lot coverage may be supplemented by 5% if mitigation measures are implemented.
  - The mitigation consists of providing stormwater infiltration for the additional impervious area beyond the base maximum lot coverage at a rate of 2.4 inches in 24 hours.

Lot Coverage Requirement

- Sample Lot Coverage Chart:

LOT COVERAGE CALCULATIONS	
House	3,250 SF
Driveway	956 SF
Walkway	120 SF
Pool	432 SF
Outdoor Kitchen	256 SF
Deck	260 SF
Patio	480 SF
Terrace	364 SF
Pervious Pavers (50%)	360 SF x 0.5 = 180 SF
Total Lot Coverage	6,298 SF (30.2%)

Single Family Residence (RD-18 Zoning)
Lot Size = 0.478 acres x 43,560 SF/acre
= 20,821 square feet

Maximum Lot Coverage:
20,821 SF x 0.35 (35%) = 7,287 SF

Actual Lot Coverage < Maximum Lot Coverage
6,298 SF < 7,293 SF (okay)

Maximum Lot Coverage Satisfied

Tree Canopy Requirement

- The Tree Canopy Coverage Requirement is the percentage of Total Square Footage of the Tree Canopy Coverage on any property divided by the Total Square Footage of the Property:

$$\text{Tree Canopy Coverage} = \frac{\text{Total Square Footage of Tree Canopy Coverage}}{\text{Total Square Footage of Property}}$$

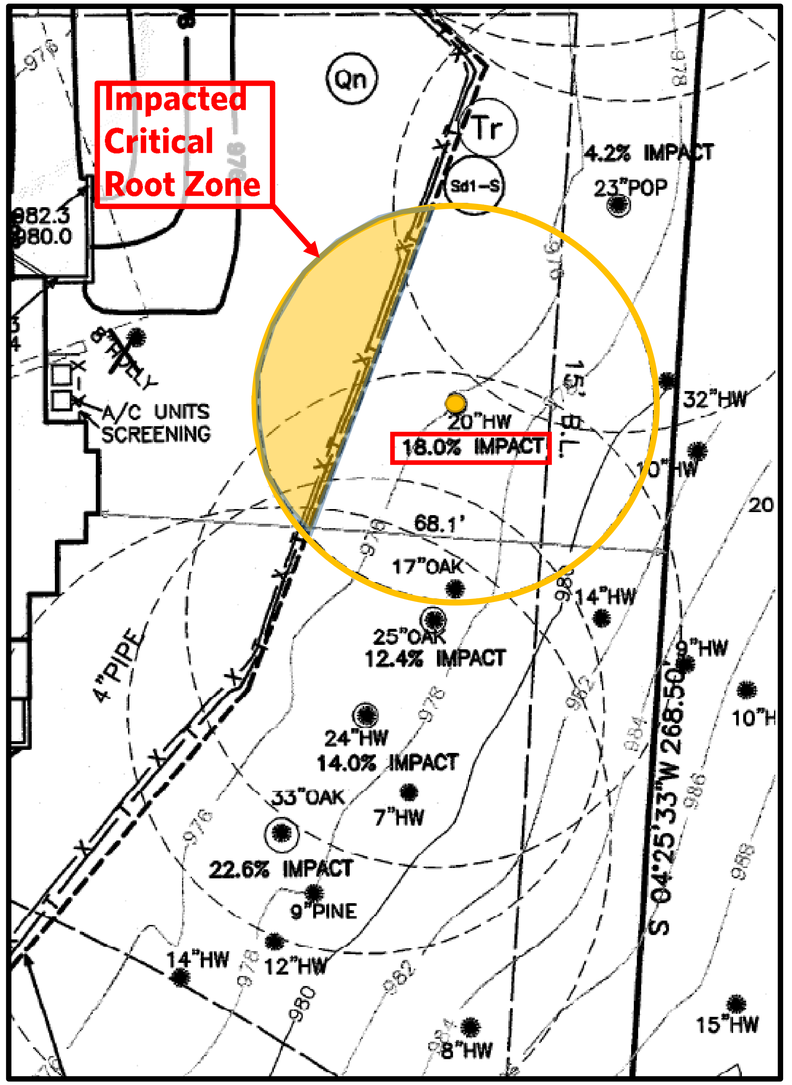
- Allowable Canopy Coverage:
  - 35% (residential – single family, townhome, condo)
    Calculation: Lot size (in square feet) x 0.35
  - 40% for all other uses (commercial, industrial, apartments)
    Calculation: Lot size (in square feet) x 0.40

Tree Canopy Requirement

- If you are already under your canopy requirements, you only mitigate and recompense for the Protected Trees that were removed or impacted over 25%.
- Protected Trees are trees that measure 18″ in diameter or larger in fair or better condition.
- Only a Certified Arborist can determine if a tree *is not* in fair condition.

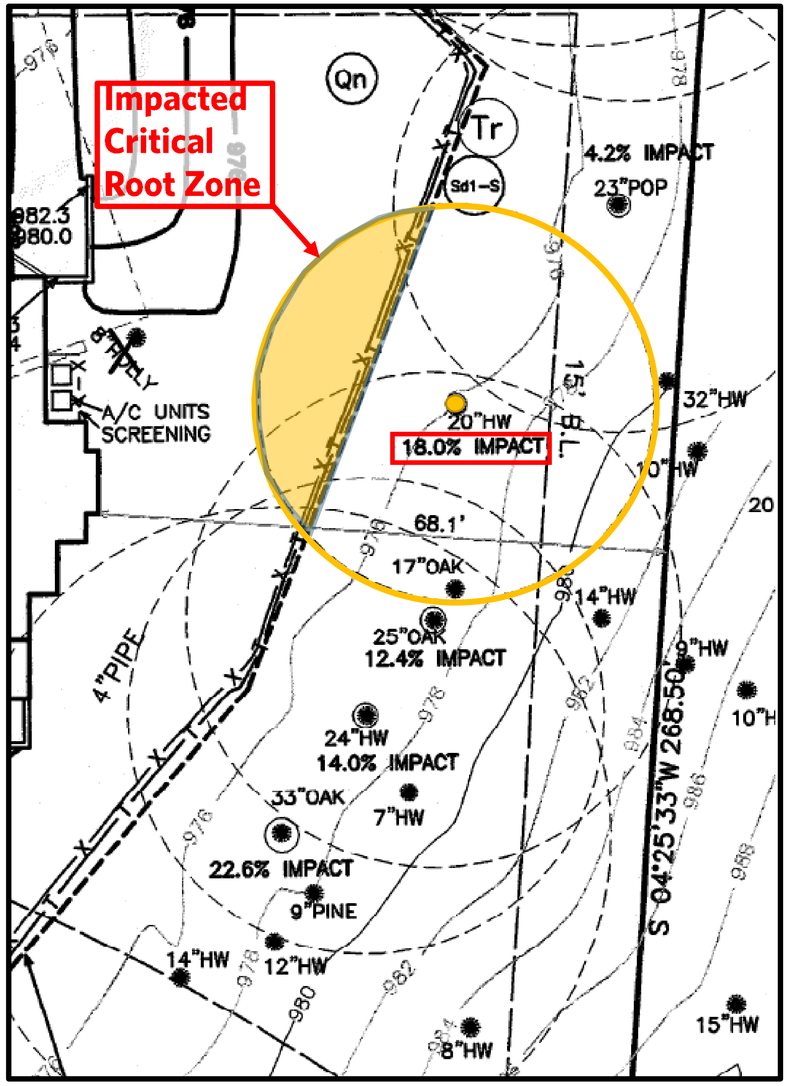
Tree Canopy Requirement

- You must submit a Site Plan that includes the following information:
  1. All trees on site, including their Diameter at Breast Height (DBH), species and location.
     - DBH is the standard for measuring trees and refers to the tree diameter measured at 4.5 feet above the ground.
  2. All Boundary Trees (any tree whose Critical Root Zone extends onto your property).
     - The Critical Root Zones of all impacted trees is represented at 1.25 feet per 1 inch of diameter size.



Tree Canopy Requirement

- You must submit a Site Plan that includes the following (continued):
  3. The percentage levels of impact to the critical root zones (anything impacted over 25% is considered lost and does not count towards the Canopy Coverage).
  4. All trees proposed for removal shall be shown on the site plan and listed in an inventory.
  5. The standard details for tree save fencing and tree planting, if applicable shall be shown on the site plans.



Tree Canopy Requirement

- You must submit a Site Plan that includes the following (continued):
  6. Canopy Coverage Chart if you are building an enclosed structure (Note: Decks and patios are exempt).
     - Protected Trees are trees 18″ in diameter and larger.
       - Count for 1,000 square feet.
     - Protected Boundary Trees are Boundary Trees over 18″ in diameter that extend on to your property.
       - Count for 1,250 square feet.
     - Landmark Trees (LM) are hardwood trees 27″ in diameter and larger as well as pine trees 30″ in diameter and larger.
       - Count for 1,250 square feet.

Tree Canopy Requirement

- Sample Canopy Coverage Chart:

Single family residence with a lot size of 20,836 square feet:
20,836 x 0.35 (35%) = 7,293 SF of required Tree Canopy Coverage

DBH	Species	Percentage of Impact	Removed?	Square Footage
18″	Hardwood	0%	No	1000
31″	Pine	3%	No	1250 (LM)
22″	Pine	27%	No, but considered lost.	0
19″	Pine	9%	No	1000
25″	Pine	0%	No	1000
28″	Hardwood	14%	No	1250 (LM)
19″	Hardwood	50%	Yes	1000
26″	Hardwood	21%	No	0

Prior Canopy	8,500 SF
Required Canopy	7,293 SF
Post Canopy	6,500 SF
Shortage	793 SF
Recompense	793 x $1.20 = $951.60
Replanting	1 Tree (1,000 SF)

6,500 SF + 1,000 SF = 7,500 SF

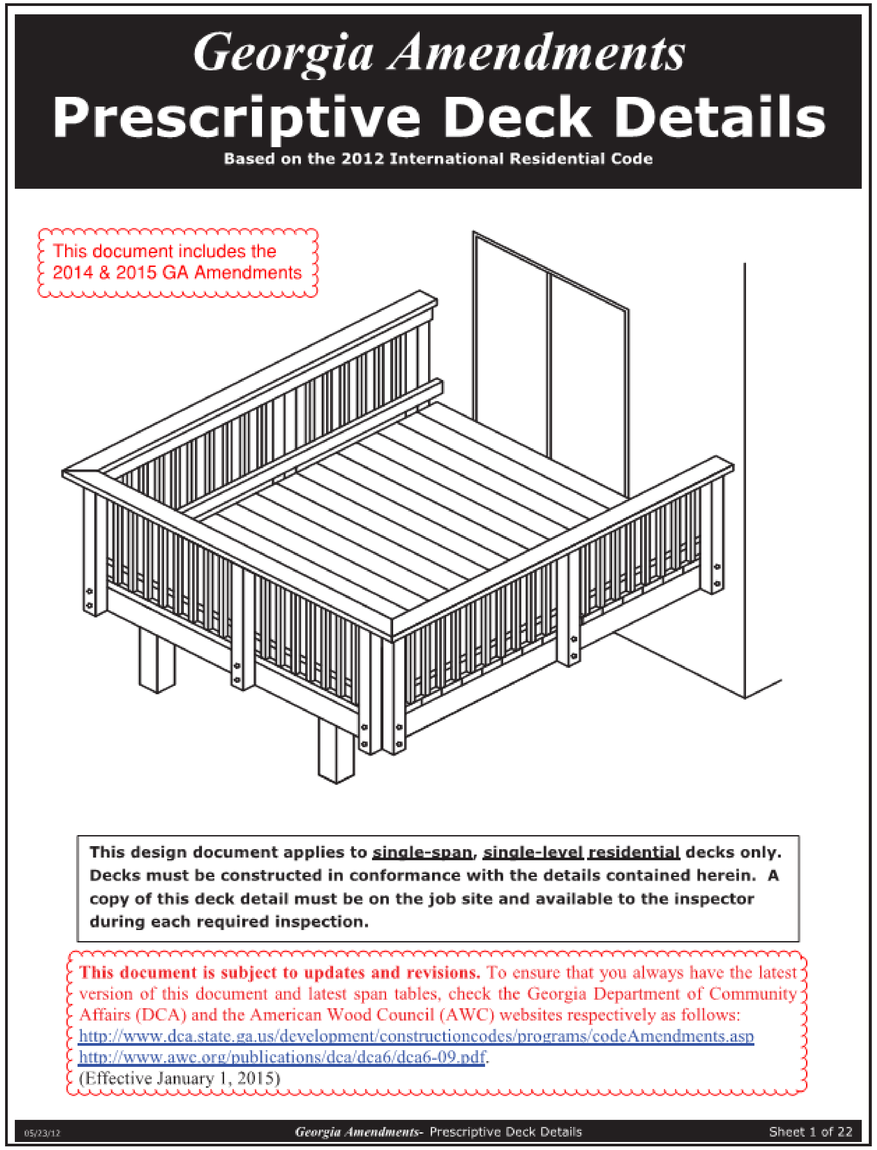
Canopy Requirements Satisfied

Decks

Decks – Planning & Zoning

- Primary and Secondary Street Setbacks. Porches, raised entries, and stoops may encroach no more than 10 feet into a required setback, including steps, if such extension is at least 5 feet from the vertical plane of any lot line.
- Common Side and Rear Setbacks. Unenclosed patios, decks, terraces or fire escapes may encroach into a common side or rear setback, provided that such extension is at least 5 feet from the vertical plane of any common side lot line and 10 feet from any rear lot line.

Decks – Prescriptive Deck Details



Georgia Amendments

Prescriptive Deck Details

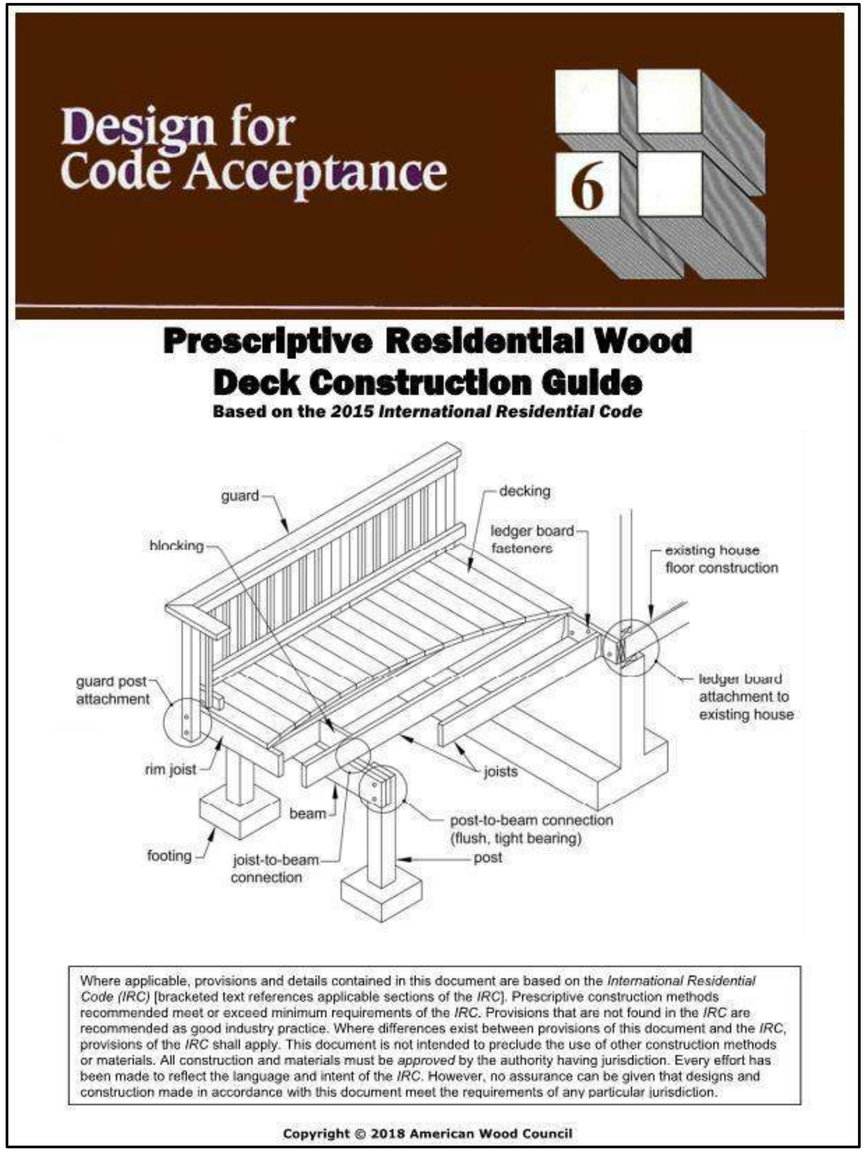
Based on the 2012 International Residential Code

This document includes the 2014 & 2015 GA Amendments

This design document applies to single-span, single-level residential decks only. Decks must be constructed in conformance with the details contained herein. A copy of this deck detail must be on the job site and available to the inspector during each required inspection.

This document is subject to updates and revisions. To ensure that you always have the latest version of this document and latest span tables, check the Georgia Department of Community Affairs (DCA) and the American Wood Council (AWC) websites respectively as follows:
http://www.dca.state.ga.us/development/constructioncodes/programs/codeAmendments.asp
http://www.awc.org/publications/dca/dca6/dca6-09.pdf.
(Effective January 1, 2015)

05/23/12 *Georgia Amendments*- Prescriptive Deck Details Sheet 1 of 22



Design for Code Acceptance

6

Prescriptive Residential Wood Deck Construction Guide

Based on the *2015 International Residential Code*

Where applicable, provisions and details contained in this document are based on the *International Residential Code (IRC)* [bracketed text references applicable sections of the *IRC*]. Prescriptive construction methods recommended meet or exceed minimum requirements of the *IRC*. Provisions that are not found in the *IRC* are recommended as good industry practice. Where differences exist between provisions of this document and the *IRC*, provisions of the *IRC* shall apply. This document is not intended to preclude the use of other construction methods or materials. All construction and materials must be *approved* by the authority having jurisdiction. Every effort has been made to reflect the language and intent of the *IRC*. However, no assurance can be given that designs and construction made in accordance with this document meet the requirements of any particular jurisdiction.

Decks – Bracing

- All decks greater than 4'-0" above grade shall resist lateral loading by providing diagonal bracing
- Diagonal bracing shall be 2x4 minimum and shall be 1/2“ dimeter through-bolts.
- Decks shall have diagonal bracing installed at beam locations.

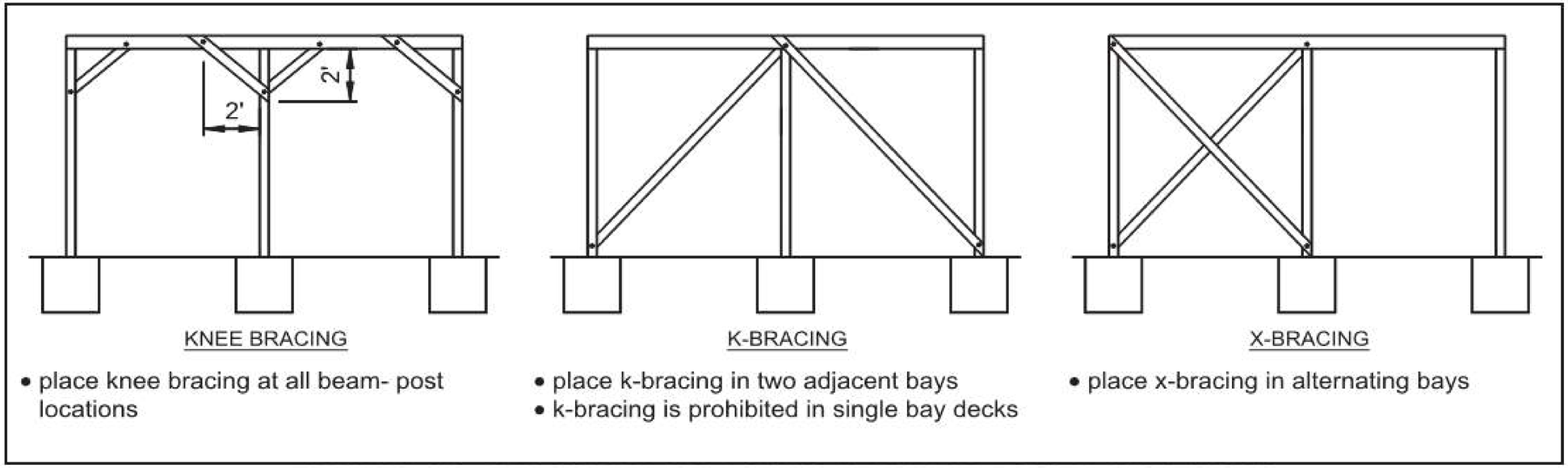


FIGURE 22: DIAGONAL BRACING AT BEAM-POST LOCATIONS (all decks)

Decks – Bracing

- Free-standing decks shall also have diagonal bracing installed parallel to joists at each post location

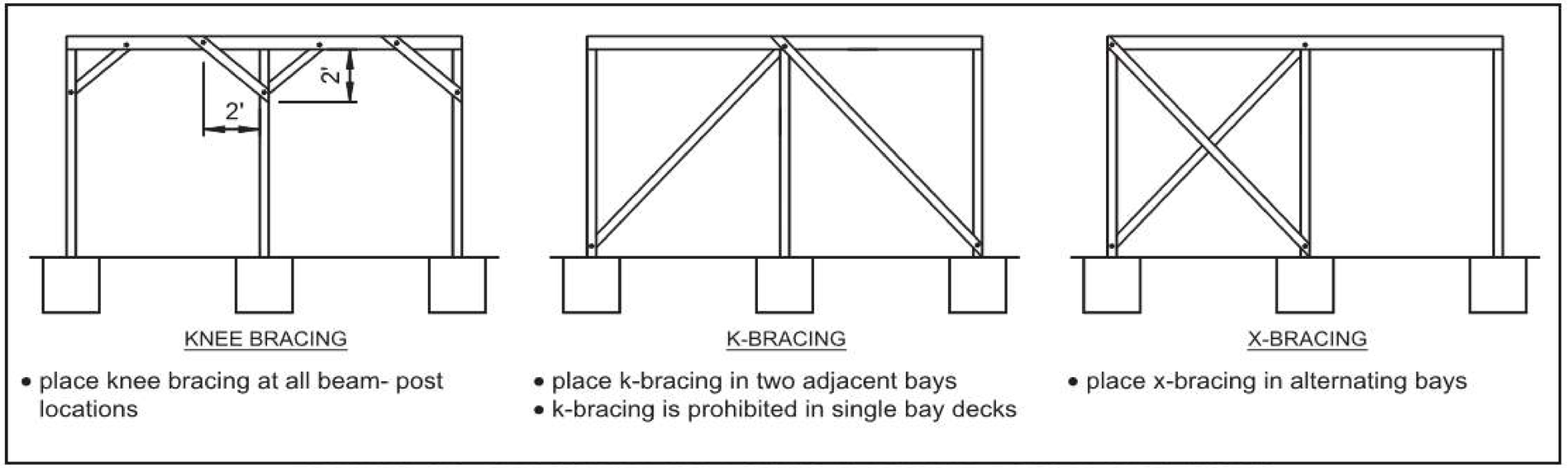


FIGURE 22: DIAGONAL BRACING AT BEAM-POST LOCATIONS (all decks)

Decks – Bracing

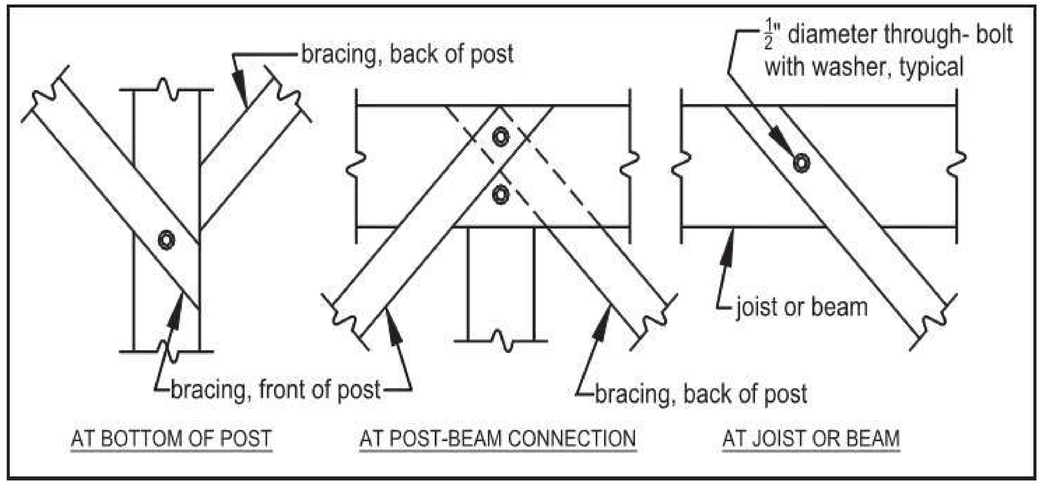


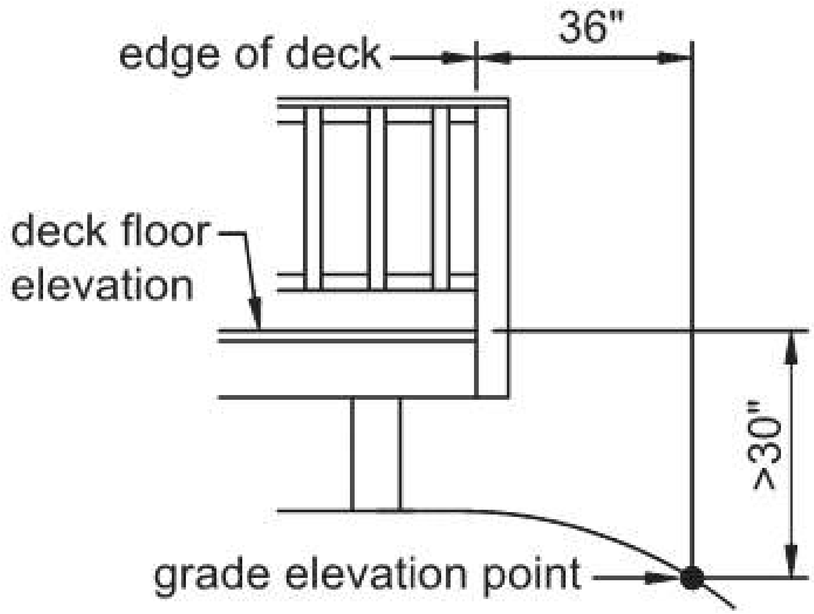
FIGURE 24: TYPICAL CONNECTIONS OF DIAGONAL MEMBERS

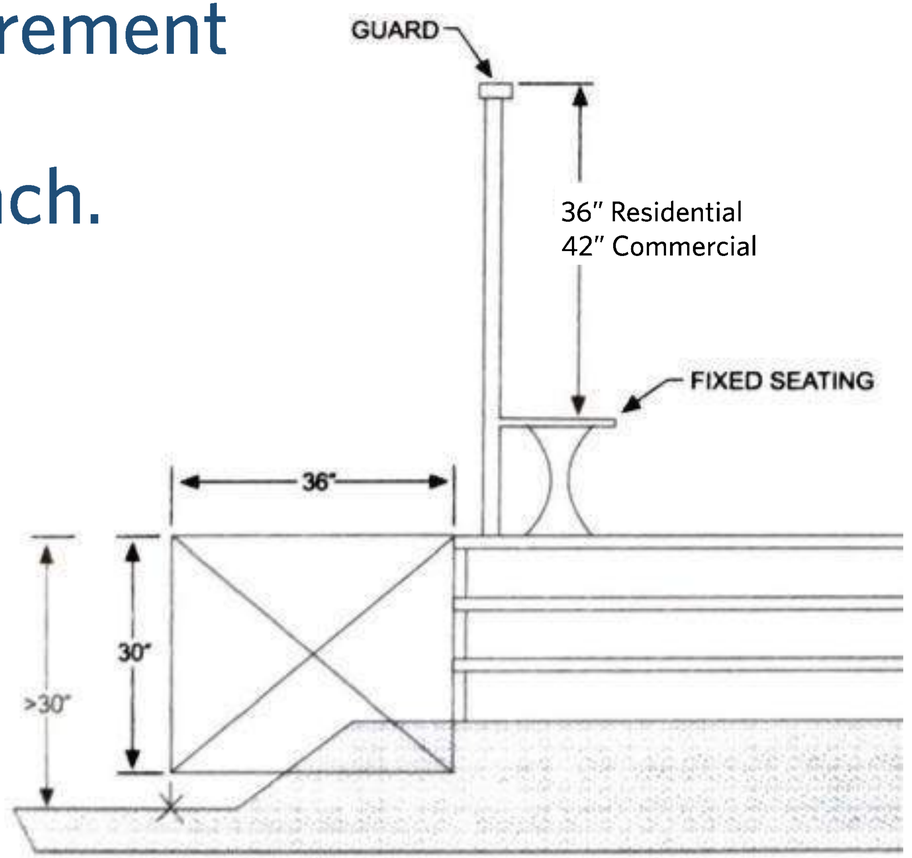
Decks – Cantilevers

- All cantilevered floor joists shall have full depth blocking installed over the beam support between each joist to prevent racking of the floor joist at the support.

Decks – Guards

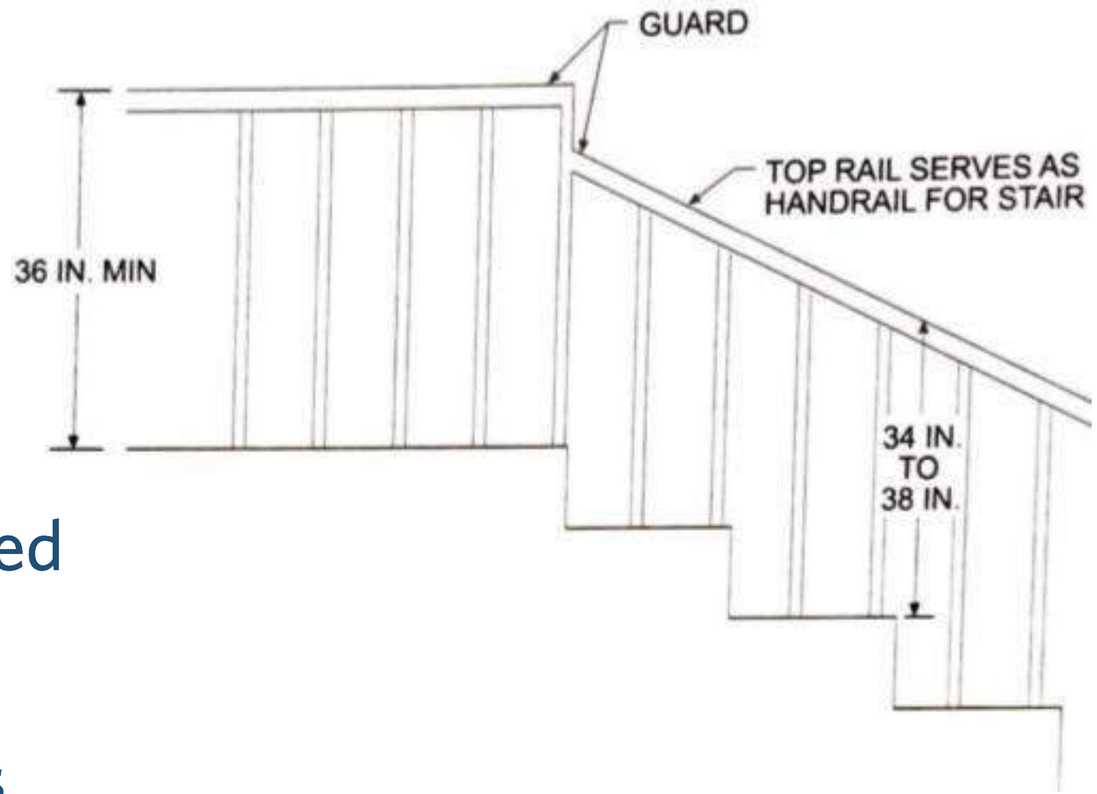
- Guards shall be located along open sided walking surfaces (including stairs, ramps and landings) when the deck is greater than 30" above grade at a point 36" from the edge of the deck.
- Note: The guardrail height measurement begins at the top of fixed seating because you can stand on the bench.





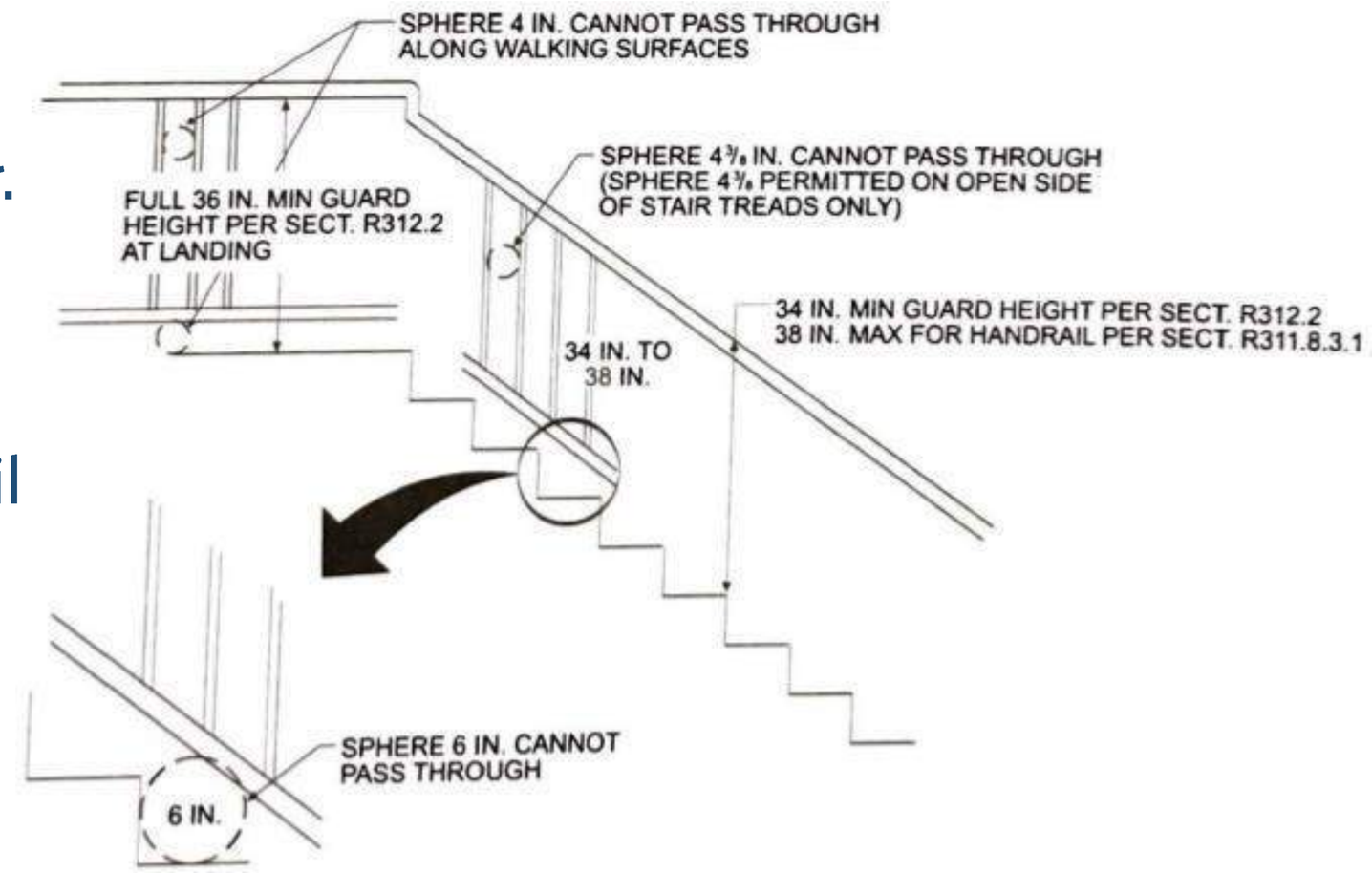
Decks – Guards

- Guards shall not be less than 36″ high measured vertically above the walking surface, adjacent fixed seating or the line connecting the leading edges of treads.
  - Exceptions:
    1. Guards on the open side of stairs shall have a height not less than 34″ measured vertically from a line connecting the leading edges of the treads.
    2. Where the top of the guard also serves as a handrail on the open side of stairs, the top of the guard shall not be less than 34″ and not more than 38″ measured vertically from a line connecting the leading edges of the treads.



Decks – Guards

- Guards shall not have openings from the walking surface to the required guard height which allow passage of a sphere 4″ in diameter.
  - Exceptions:
    1. The triangular opening at the open side of stairs formed by the riser, tread and bottom rail of a guard shll not allow passage of a sphere 6″ in diameter.
    2. Guards on the open side of stairs shall not have openings which allow passage of a sphere 4-3/8″ diameter.



Decks – Guards

- Horizontal cabling in guardrails is very difficult to install and frequently does not pass inspection since the cables can stretch resulting in an opening greater than 4″
- The industry standard for horizontal cable spacing is 3″ based on the intermediate posts being spaced every 4 feet to maintain cable spans with minimum deflection.
- Never exceed a spacing of 60″ between posts.
- For each foot over 4 feet that you run cable, you must move your cable 1/4″ closer together. For example, the cable spacing would be 2-3/4″ for a cable span of 5 feet.

Decks – Submittal Requirements

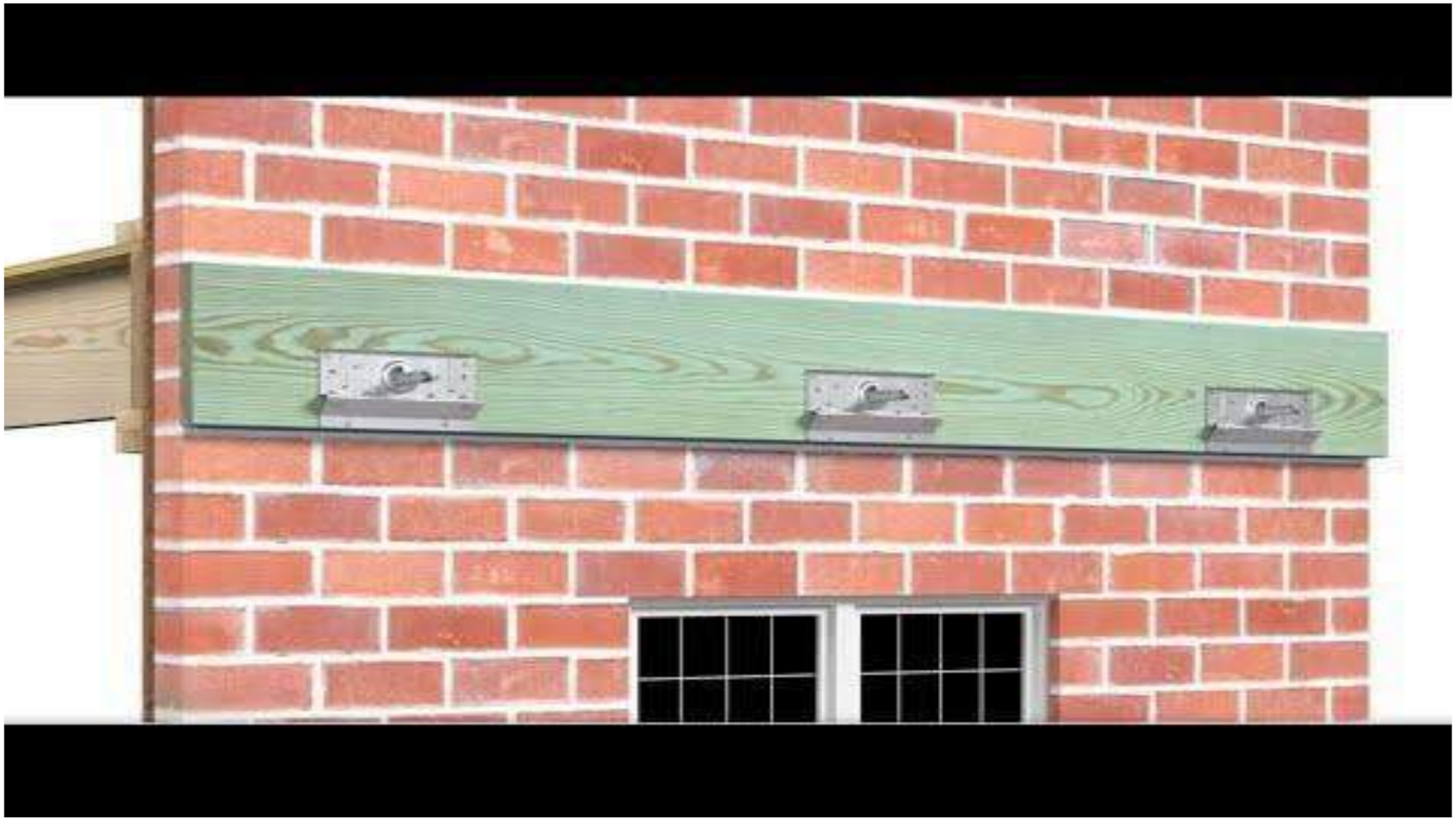
- Original Submittal:
  - Complete set of construction documents:
    - Site Plan (including Lot Coverage and Tree Canopy Coverage calculations)
    - Floor Plans (including dimensions)
    - Elevations & Sections
    - Structural Foundation Plan & Details (including reinforcement)
    - Structural Framing Plan & Details (including connections)
    - Note: Lesser submittal requirements may be allowed for smaller and simple deck replacement projects
  - Provide an electronic PDF file of all the construction documents on a USB thumb drive

Decks – Submittal Requirements

- Revisions:
  - All revisions shall be clouded, dated and clearly labeled
  - Owner is responsible for inserting the revised sheets into the previously permitted set
  - Provide an updated electronic PDF file of all the construction documents including the revised sheets on a USB thumb drive

Decks – Ledger Attachment Through Brick Veneer

Decks – Simpson BVLZ – Brick Veneer Ledger



Decks – Required Inspections

1. Deck Site Preconstruction Meeting (if requires erosion control)
2. Deck Preconstruction Meeting
3. Deck Foundation
4. Deck Rough Framing
5. Deck Final Inspection

Accessory Structures

Accessory Structures – Planning & Zoning

- The Development Code Section 7.8.22 - Accessory Structures separates accessory structures into two categories:
    1. Minor Residential Accessory Structures – Typically associated with single-family residential uses that are not predominately intended for the shelter of humans or goods. Typically, minor residential accessory structures are smaller in size than major residential accessory structures and are unenclosed on three or more sides.
    2. Major Residential Accessory Structures - Typically associated with single-family residential uses that are predominately intended for the shelter of humans or goods. Typically, major residential accessory structures are enclosed on two or more sides.

Accessory Structures – Planning & Zoning

	Minor Accessory Structure	**Major Accessory Structure**
Examples	Pergola, trellis, gazebo, outdoor fire place, fire pit, play structure, sport court, outdoor kitchen, tree house (unconditioned), detached carport, swimming pool, spa	• Cabana, pool house, detached garage, shed
Location	• Allowed in side or rear yard (not front yard) • Less Restrictive of the following: a) No closer than the building setbacks (buildable area); or b) Must be a minimum of 10′-0″ from any property line	• Allowed in side or rear yard (not front yard) • If >500 sq. ft.: must meet the building setbacks • If <500 sq. ft.: same as Minor Accessory Structure
Height	• 15′ height max. (if located in the setbacks) • 24′ height max. (if in buildable area) • Each façade must comply with height	• Same as Minor Accessory Structure

Accessory Structures – Planning & Zoning

- A Guest House must meet the following criteria:
- No more than one guest house per lot allowed.
- A separate kitchen facility is allowed.
- Heated floor area must be less than 50% of the principal dwelling unit first-floor heated floor area, or must be less than 1,200 square feet, whichever is less.
- The location is limited to the rear yard and all building setbacks apply.

- Height may be no greater than 2 stories and 24 feet.
- A guest house may be located over a garage, provided its location and size meet the requirements of the use standards above.
- Only allowed in RE-1 & RE-2 zoning districts

Accessory Structures – Planning & Zoning

Accessory Structures – Grading Limitations

- Sec. 9.2.4. - Land Development Requirements
  - An undisturbed natural vegetative buffer is maintained for 50 feet, measured horizontally, on all banks of the state waters as measured from the point of wrested vegetation.
  - An additional setback is maintained for 25 feet, measured horizontally, beyond the undisturbed natural vegetative buffer, in which all impervious cover is prohibited.
- Section 9.4.2 - Grading
  - Grading is significantly limited on Steep Slopes of 35% or Greater
  - In single family residential zoning districts, gradin mititgation is required in the side yard setbacks.

Accessory Structures – No Permit Required

- Per the International Building Code (IBC), a permit is not required for *one-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided that the floor area is not greater than 120 square feet.*
- Per the International Building Code (IRC), a permit is not required for "One-story detached accessory structures, provided that the floor area does not exceed 200 square feet."

Accessory Structures – Submittal Requirements

- Original Submittal:
  - Complete set of construction documents:
    - Cover Page (with the referenced Building Codes, design criteria, sheet index and key plan),
    - Site Plan (including Lot Coverage and Tree Canopy Coverage calculations)
    - Floor Plans (including dimensions)
    - Elevations & Sections
    - Structural Foundation Plan & Details
    - Structural Framing Plan & Details
  - Provide an electronic PDF file of all the construction documents on a USB thumb drive

Accessory Structures – Submittal Requirements

- Revisions:
  - All revisions shall be clouded, dated and clearly labeled
  - Owner is responsible for inserting the revised sheets into the previously permitted set
  - Provide an updated electronic PDF file of all the construction documents including the revised sheets on a USB thumb drive

Accessory Structures – Required Inspections

1. Site Preconstruction
2. Building Preconstruction Meeting
3. Building Foundation
4. Foundation Form Survey Submittal
5. Building Foundation Wall Reinforcement
6. Foundation Wall Form
7. Foundation Waterproofing & Dampproofing
8. Under Slab

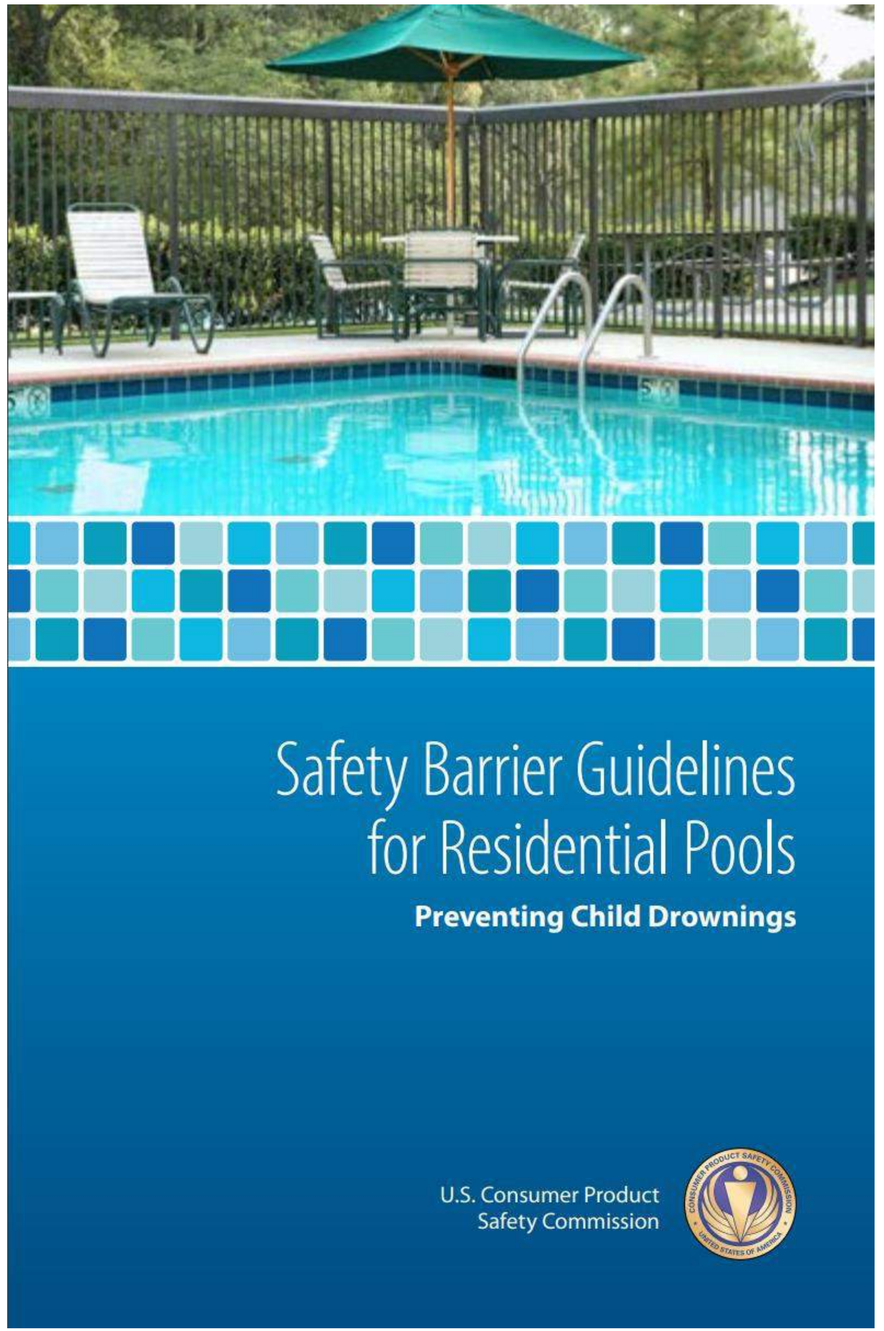
Accessory Structures – Required Inspections

9. Slab on Grade
10. Sheathing Inspection
11. Water Resistive Barrier / House Wrap
12. Building Rough Combo
13. Insulation Water Quality Device / Storm Water Receptor
14. Final Building Combo
15. Final Site Inspection
16. Final Zoning Inspection

Pools

Pools – Planning & Zoning

- All swimming pools must be completely surrounded by an enclosure that meets the requirements of the International Swimming Pool and Spa Code
- Barriers include a fence or wall, alarms for the house, and a power safety cover over the pool.
- The enclosure must be in place prior to pool completion and issuance of a Certificate of Completion

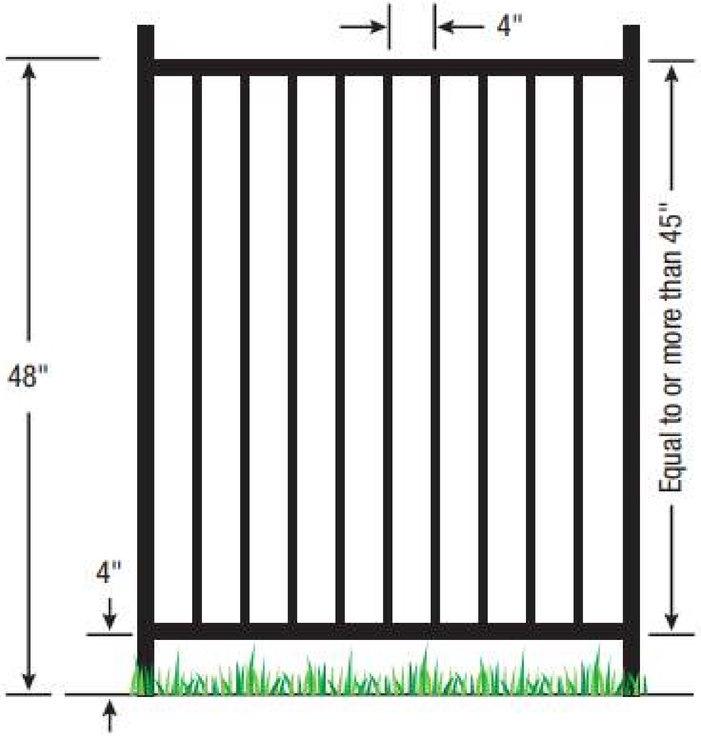


Pools – Planning & Zoning – Safety Barriers

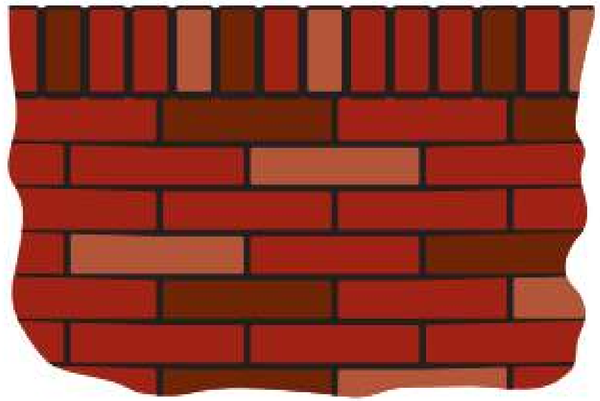
- It is important to note that barriers are not child proof
- Barriers provide layers of protection for a child when there is a lapse in adult supervision
- Barriers give parents additional time to find a child before the unexpected can occur.

Pools – Planning & Zoning – Fence

- The top of a pool barrier should be at least 48 inches above grade measured on the side of the barrier which faces away from the swimming pool.

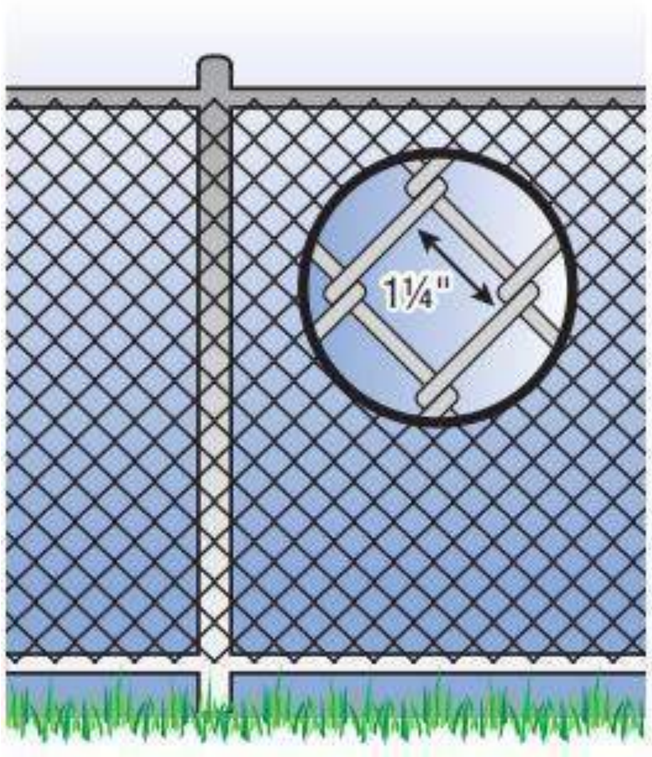


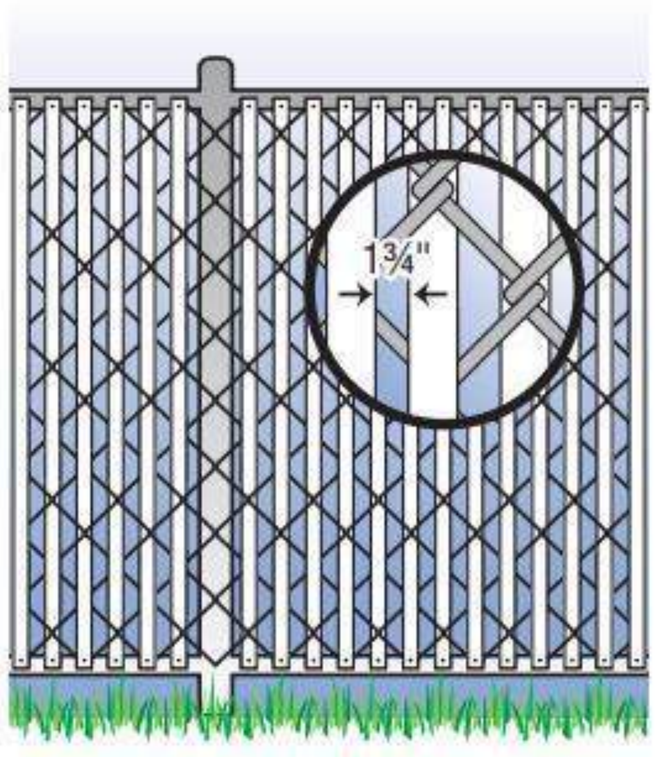
- For a Solid Barrier (Wall), no indentations or protrusions should be present, other than normal construction tolerances and masonry joints.



Pools – Planning & Zoning – Fence

- For a Chain Link Fence The mesh size should not exceed 1-1/4" inches square unless slats, fastened at the top or bottom of the fence, are used to reduce mesh openings to no more than 1-3/4 inches.





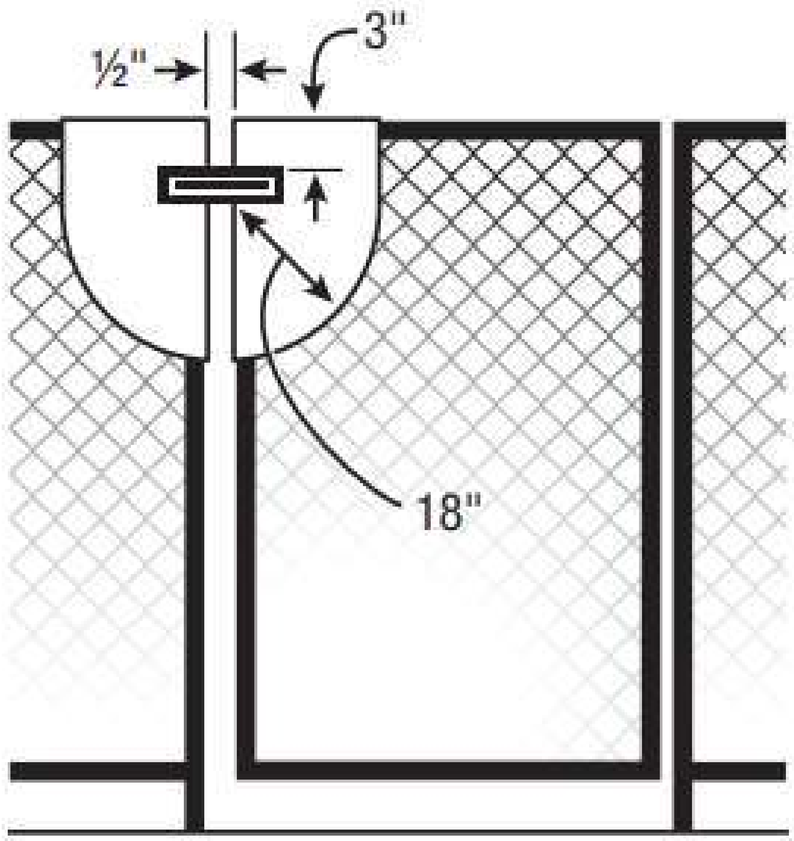
Pools – Planning & Zoning – Gates

- All gates should be designed with a locking device.
- Gates should open out from the pool and should be self-closing and self-latching.

  Reason: If a gate is not completely latched, a young child pushing on the gate in order to enter the pool area will at least close the gate and may actually engage the latch.

Pools – Planning & Zoning – Gates

- When the release mechanism of the self-latching device on the gate is less than 54 inches from the bottom of the gate, the release mechanism for the gate should be at least 3 inches below the top of the gate on the side facing the pool.
- The gate and barrier should have no opening greater than 1/2 inch within 18 inches of the latch release mechanism. This prevents a young child from reaching through the gate and releasing the latch.



Pools – Planning & Zoning – Alarms

- All doors and windows (sill height less than 48″) that allow access to a swimming pool should be equipped with an audible alarm which sounds when the door and/or window are opened.
- Alarms should meet the requirements of UL 2017 – General Purpose Signaling Devices and Systems with the following features:
  1. Sound lasting for 30 seconds or more within 7 seconds after the door is opened.
  2. The alarm should be loud: at least 85 dBA (decibels) when measured 10 feet away from the alarm mechanism;

Pools – Planning & Zoning – Alarms

3. The alarm sound should be distinct from other sounds in the house, such as the telephone, doorbell and smoke alarm.
4. The alarm should have an automatic reset feature to temporarily deactivate the alarm for up to 15 seconds to allow adults to pass through house doors without setting off the alarm.
5. The deactivation switch could be a touchpad (keypad) or a manual switch, and should be located at least 54 inches above the threshold and out of the reach of children.

Pools – Planning & Zoning – Power Safety Covers

- Power safety covers can be installed on pools to serve as security barriers, especially when the house serves as the fourth wall or side of a barrier.
- Power safety covers should conform to the specifications in the ASTM F 1346-91 standard, which specifies safety performance requirements for pool covers to protect young children from drowning.

Pools – Submittal Requirements

- Original Submittal:
  - Complete set of construction documents:
    - Cover Page (with the referenced Building Codes, design criteria, sheet index and key plan),
    - Site Plan (including Elevations, Lot Coverage and Tree Canopy Coverage calculations)
    - Structural Framing Plan (including reinforcing)
    - Engineered drawings for infinity walls (designed as a cantilevered retaining wall)
  - Provide an electronic PDF file of all the construction documents on a USB thumb drive

Pools – Submittal Requirements

- Revisions:
  - All revisions shall be clouded, dated and clearly labeled
  - Owner is responsible for inserting the revised sheets into the previously permitted set
  - Provide an updated electronic PDF file of all the construction documents including the revised sheets on a USB thumb drive

Pools – Required Inspections

1. Site Preconstruction Meeting
2. Pool Preconstruction Meeting
3. Rebar Cage
4. Underground Utility
5. Bonding
6. Final Pool Combo

Retaining Walls

What Is A Retaining Wall?

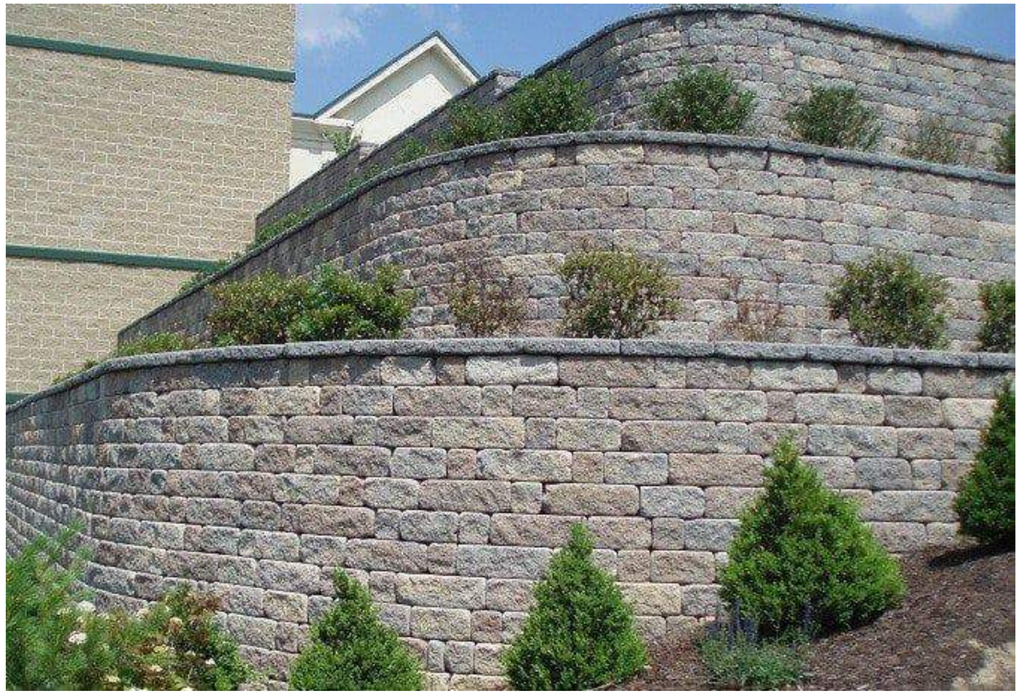
- Retaining walls are relatively rigid walls cantilevered from a footing used for supporting soil laterally so that it can be retained at different levels on each side of the wall.
- It is important to have proper drainage behind the wall in order to limit the pressure to the wall's design value. Drainage materials will reduce or eliminate the hydrostatic pressure and improve the stability of the material behind the wall.
- The International Building Code requires retaining walls to be designed to ensure stability against overturning, sliding, excessive foundation pressure and water uplift; and that they be designed for a safety factor of 1.5 against lateral sliding and overturning.

Retaining Walls – Planning & Zoning

- Sandy Springs Development Code Section 9.4.3. - Retaining Walls
  - Max height in Residential = 6′-0″ (RE,RD, RU Zoning District)
  - Max height in Commercial = up to 8′-0″ as a single wall
  - If you are retaining more soil than the maximum allowable retaining wall height, then you may use up to maximum height tiered retaining walls with 4′-0″ horizontal separation.

Retaining Walls – Planning & Zoning

- Each tier between retaining walls must be vegetated and maintained with a mix of native, evergreen and deciduous shrubs, to be approved by the City Arborist, as follows:
  - One shrub every 4 linear feet
  - The Director may waive this landscaping standard for retaining walls that slope back and contain natural planting.



Retaining Walls – Planning & Zoning

- There are separate setback requirements specific to the zoning district
- All retaining walls shall be finished with brick, stone, or stucco and the colors shall be natural earth tones (whites, blacks, and browns)
- Architectural Segmented or Modular block is allowed but must be installed per the specific manufacturer's specifications (Please note that the City prefers block to be straight faced (no beveled corners)

Retaining Walls – Planning & Zoning Conditions

- How are the heights measured?
  - Total retaining wall height is considered to be the vertical distance between finished grade level at the front of the wall and the grade level at the back of the wall at the same section.
- Any portion of a retaining wall extending above the finished grade is considered to be a fence or wall, subject to the requirements of Sec. 8.2.10.

Retaining Walls – Grading Limitations

- In order to protect trees and vegetation on sites and to protect the character of the neighborhood, the following standards apply to all lots in RE-, RD- and RU- Districts.
    1. In the side building setbacks:
        a) In all RE- districts, retaining walls may encroach up to 10 feet into required side building setbacks.
        b) In all RD- districts, retaining walls may encroach up to half the depth of the required side building setbacks.
        c) In all RU- districts, no encroachment for retaining walls is allowed into the required side building setbacks.

Retaining Walls – Grading Limitations

2. In the rear building setbacks:
   a) In all RE- Districts, no retaining walls are allowed within 20 feet of the rear lot line.
   b) In the RD-27, RD-18, and RD-15 districts, no retaining walls are allowed within 15 feet of the rear lot line.
   c) In the RD-12, RD-9, RD-7.5, and RU- districts, no retaining walls are allowed within 10 feet of the rear lot line.

Retaining Walls – Submittal Requirements

- Permits and Indemnification
  1. Retaining walls over 4 feet in height require a retaining wall permit and an indemnification.
  2. Retaining walls over 6 feet in height require a professional engineer's certification regarding the design of the wall.
  3. A retaining wall permit is required where an assemblage of tiered retaining walls and slopes results in an excess of a 2:1 slope.
  4. Where a retaining wall of any height supports a surcharge, a retaining wall permit may be required by the Director. Surcharge is any vertical load imposed on the retained soil that may impose a lateral force in addition to the lateral earth pressure of the retained soil.

Retaining Walls – Submittal Requirements

- Original Submittal:
  - Complete set of construction documents:
    - Cover Page (with the referenced Building Codes, design criteria, sheet index and key plan),
    - Site Plan (including Top of Wall and Bottom of Wall Elevations, Lot Coverage and Tree Canopy Coverage calculations)
    - Structural Framing Plan (including reinforcing)
    - Engineered drawings for infinity walls (designed as a cantilevered retaining wall)
  - Provide an electronic PDF file of all the construction documents on a USB thumb drive

Retaining Walls – Submittal Requirements

- Revisions:
  - All revisions shall be clouded, dated and clearly labeled
  - Owner is responsible for inserting the revised sheets into the previously permitted set
  - Provide an updated electronic PDF file of all the construction documents including the revised sheets on a USB thumb drive

Retaining Walls – Required Inspections

1. **Retaining Wall Foundation**
2. **Retaining Wall Reinforcement**
3. **Retaining Wall Form**
3. **Retaining Wall Final** – All retaining walls shall be installed and faced with the City approved veneer. All guardrails shall be installed where the retaining walls are more than 30″ above the lower grade measured anywhere within 36″ horizontally from the face of the wall.

   Note: For segmental retaining walls, a certification letter from the installer/manufacturer shall be submitted stating that the wall was installed per the manufacturer's specifications and details.

Inspection Guidelines

Inspection Guidelines

- Required inspections must be requested prior to concealment of work.
- Concealment of work without required inspections will result in the inspection being ***rejected***.
- **Rejected** inspections are subject to a $250 penalty fee and require a Building Official review on site.
- ***Failed*** inspections are subject to a $75 re-inspection fee.
- Subsequent inspections cannot commence without passing the previous required inspection.

Inspection Guidelines (cont.)

- Work completed without a permit are subject to the following:
  - Possible fine and/or ticket
  - Required to apply for a permit for the unpermitted work
    - Plan review and approval
  - Subject to double permit fees
  - Require a Building Official review on site
    - Removal of existing finishes as necessary to verify code compliance of the concealed scope of work to the satisfaction of the Building Official

Certificate of Completion

Certificate of Completion (CC)

- A Certificate of Completion shall be applied for by the applicant and issued by the City after the project has passed the following inspections:
  - Final Building Combo (always required)
  - Final Site Inspection (always required)
  - Approved As-Built Survey (always required except for one-story accessory structures not greater than 120 square feet *or* like-for-like deck replacements; may vary case by case)
  - Final Fire Inspection (not required for residential)
  - Final Zoning Inspection (only required to verify compliance with any conditional variances to the zoning regulations that have been agreed upon during the permit review process.

Future Seminar Topics

Future Seminar Topics

- The *New* EnerGov Citizen Self Service (CSS) – *Coming Soon!*
  - Replacing the old Contractor Access Portal (CAP)
- 2018 International Building Code Updates
  - Wednesday, January 15, 2020
- Proper Anchor, Strapping and Holdown Installations
  - Collaboration with Simpson Strong-Tie
- Common Construction Mistakes
  - Collaboration with The Engineered Wood Association

Questions?