GRANICUS

Accessibility Compliance in the CMS

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1. Headings

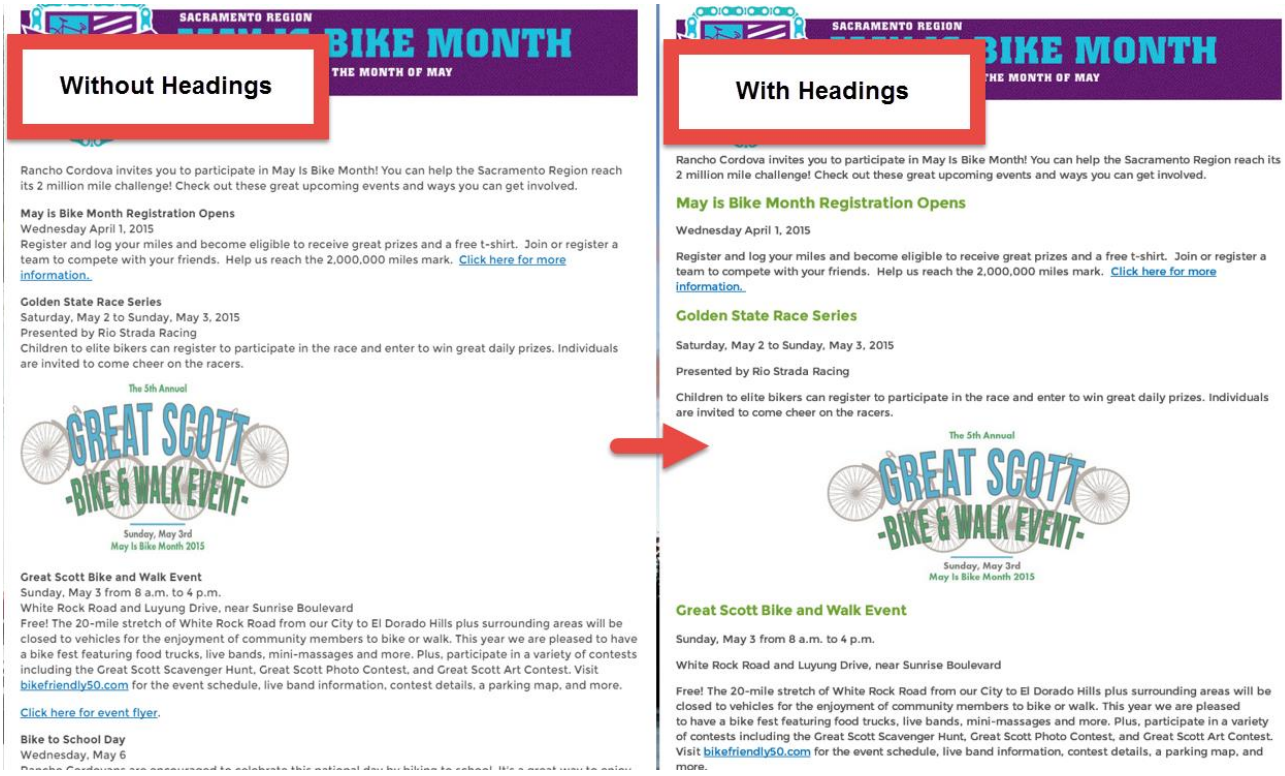
The headings tool allows screen readers to skip through content by section and subsection. Users listen to each heading first, and choose whether or not to access the content within it.

a. Use Headings to Create Sections and Subsections .....

A common practice is to use bold, italics, and underline to mark a section header. Web Accessibility Best Practice is to use a proper heading structure instead. However, do not use headers to achieve visual results only.

Example: May is Bike Month

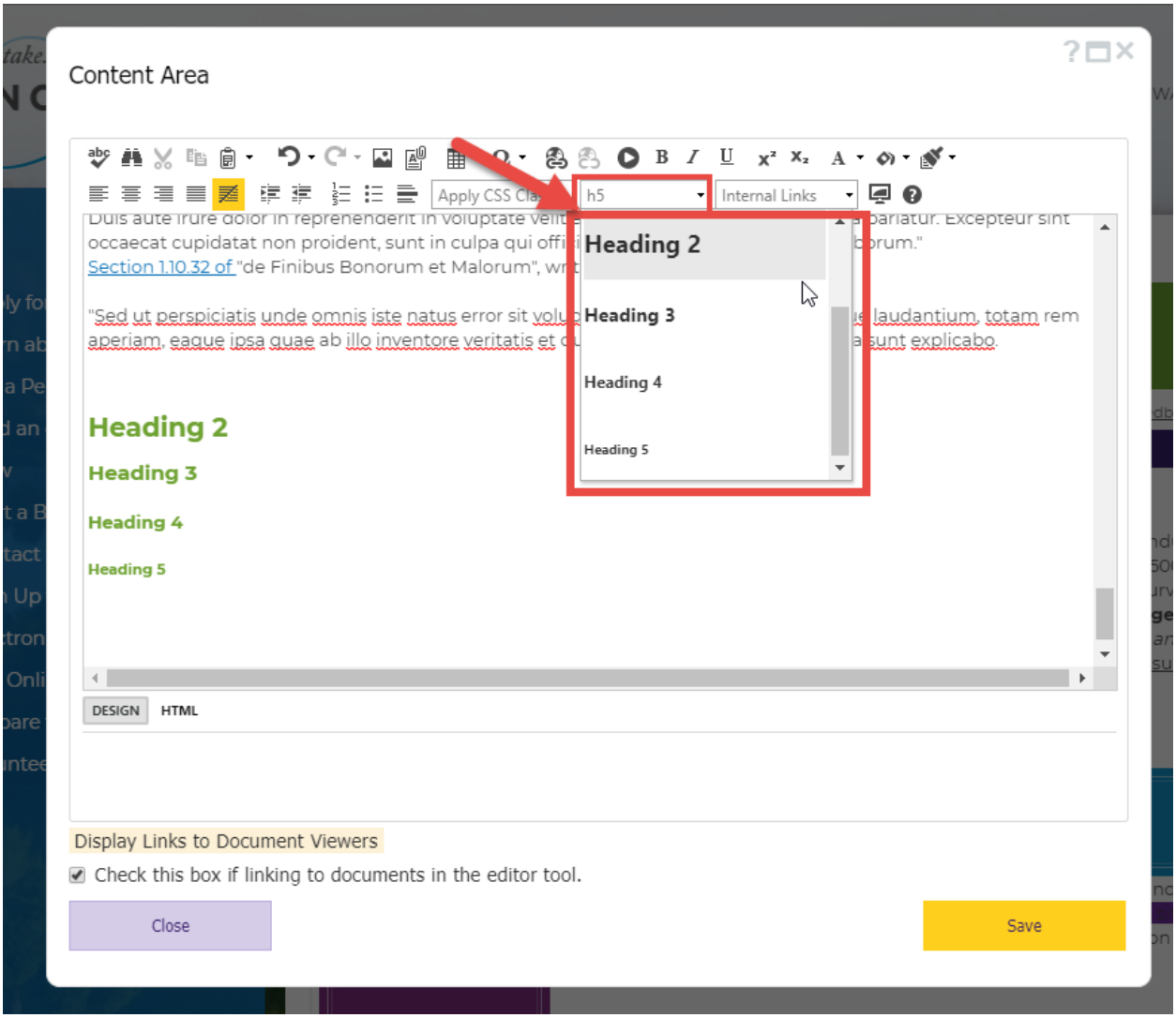
See below for a page where heading formatting was added:



*The example on the left uses **bolded text** to denote a section heading.*

How to Apply Headings

All RAD editor or detail/Content Areas in the visionCMS have the same icons and drop downs. Heading formatting can be applied via the dropdown shown below:



*You can either place the cursor on the **same line** as the text, or highlight the text. Then select the appropriate Heading from the list.*

b. Maintain Heading Order and Sequentiality

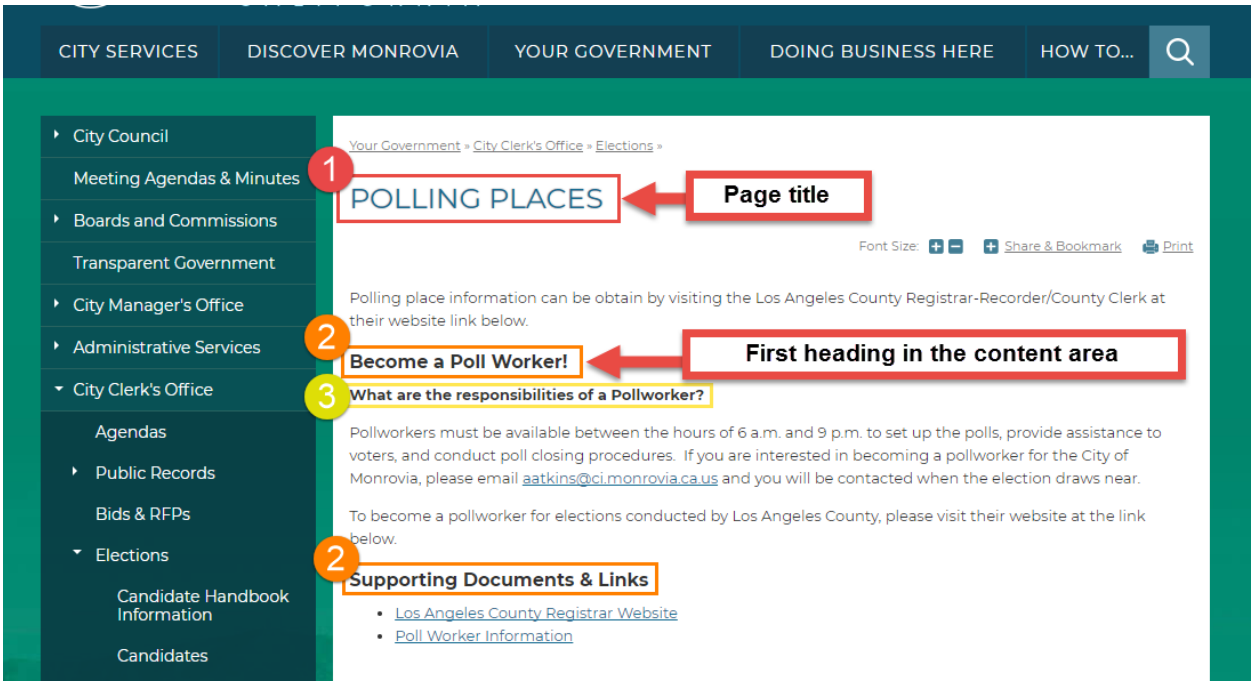
For a screen reader to match the visual order of the page, the headings must be used in order and cannot skip levels:

Example 1: Compliant	Example 2: Non-Compliant
<h1> Grants and Scholarships **<h2> How can I apply?** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. **<h3> Eligibility Requirements** aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non 4fficial4, sunt in culpa qui 4fficial deserunt mollit anim id est laborum. **<h4> For High School Students** consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non 4fficial4, sunt in culpa qui 4fficial deserunt mollit anim id est laborum. **<h4> For College Students** consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non 4fficial4, sunt in culpa qui 4fficial deserunt mollit anim id est laborum. **<h2>Application Schedule** consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non 4fficial4, sunt in culpa qui 4fficial deserunt mollit anim id est laborum.	**<h2> Grants and Scholarships** **<h1> How can I apply?** Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. **<h3> Eligibility Requirements** aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non 4fficial4, sunt in culpa qui 4fficial deserunt mollit anim id est laborum. **<h5> For High School Students** consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non 4fficial4, sunt in culpa qui 4fficial deserunt mollit anim id est laborum. **<h5> For College Students** consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non 4fficial4, sunt in culpa qui 4fficial deserunt mollit anim id est laborum. **<h2>Application Schedule** consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non 4fficial4, sunt in culpa qui 4fficial deserunt mollit anim id est laborum.

In what order do you think a screen reader would read aloud Example 2?

c. Do not use Heading 1

In visionCMS, Heading 1 is the page title by default. As per Best Practices, you should avoid applying more Header 1 headings within the Content Area widget on a page. Remember, the RADeditor/ Details section of a piece of content have the same icons available, you can still use a Header 1 within the details of a piece of content much the same as a Page Title.



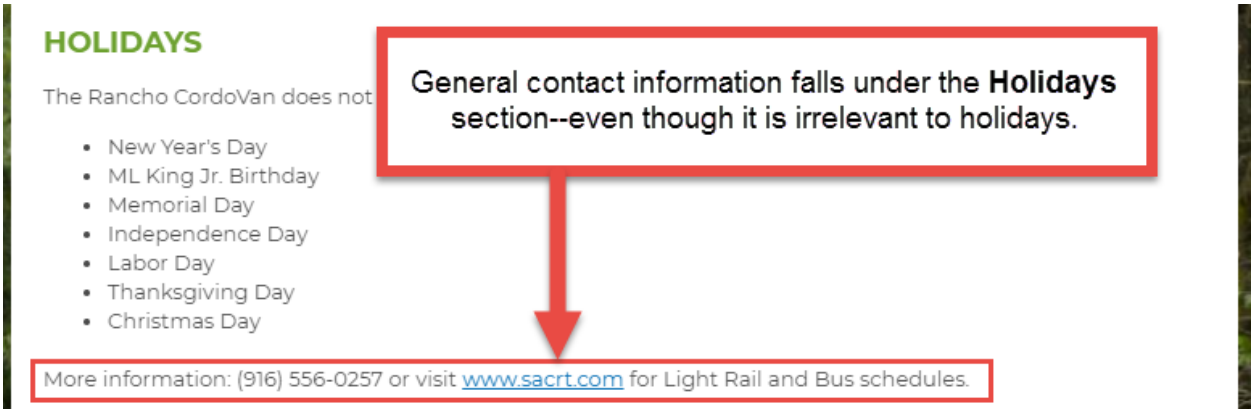
In an example like this; there should only be one Heading 1, which provides a general idea of the page's content.

The very next heading to be used within the content area **must be** Heading 2—you cannot skip levels (i.e. Heading 2 followed by Heading 4).

d. Use Subheadings for Subsections .....

When creating subsections, use the next heading number up. In the example above, “What are the responsibilities of a poll worker?” has Heading 3, as it is a subsection of “Become a Poll Worker!” (Heading 2).

All content falling after a header is defined underneath it. Example:



How would you fix the dilemma above?

2. Links

Best Practice states that Links should **always be descriptive.** Users should know the link purpose and destination without context. This is so that users have the option to scan all of the links on a page before diving into the content.

a. Include Context/Purpose in Link Text .....

ACCESSIBLE (BUT not Best Practice)	ACCESSIBLE (AND Best Practice)
Click Here to see more information on water restrictions	Water Restrictions (Click Here is Redundant)
Learn more about our town history.	Learn more about our town history

b. Supplement Link Text with a Title .....

Link titles provide additional information about a link, but are not a substitute for a well-written link.

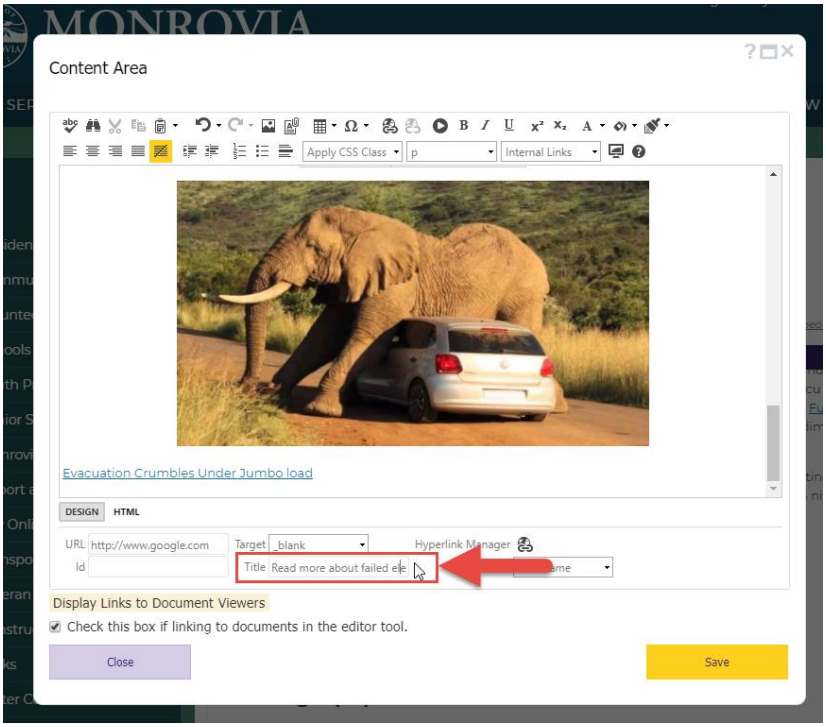
Information the user must know before clicking the link should to be in the link text.

Example:

- **Link text:** Evacuation Crumbles Under Jumbo load
- **Title:** Read more about failed elephant evacuation

How to Add the Title Attribute to a Link

Highlight the link > Enter the title in the tool bar below > Press *Enter*



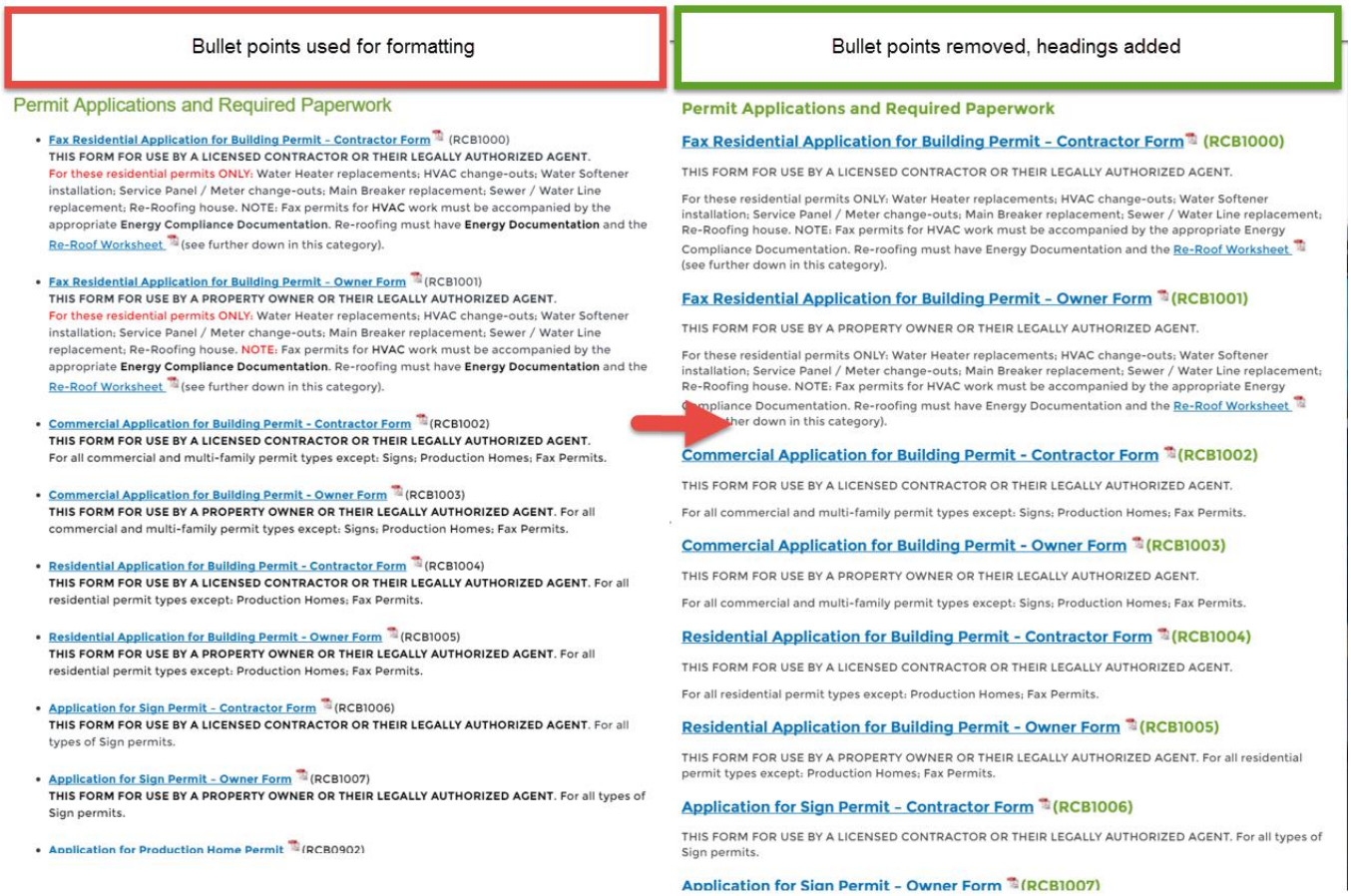
3. Bullet Points

Bullet points should only be used for lists, never paragraphs or for aesthetic purposes.

a. Use Bullet Points only for Lists

Screenreaders see bulleted paragraphs as blocks of text. This removes the ability to skip around content to find relevant information. Users are forced to listen to the entire paragraph.

Example: Downloadable Document Links



Above, bullet points are used on downloadable forms. To a screen reader, these are blocks of text.

How it was made compliant:

- Bullet points were removed
- Headings were assigned to each form download link, enabling users to skip through each document title

4. Images

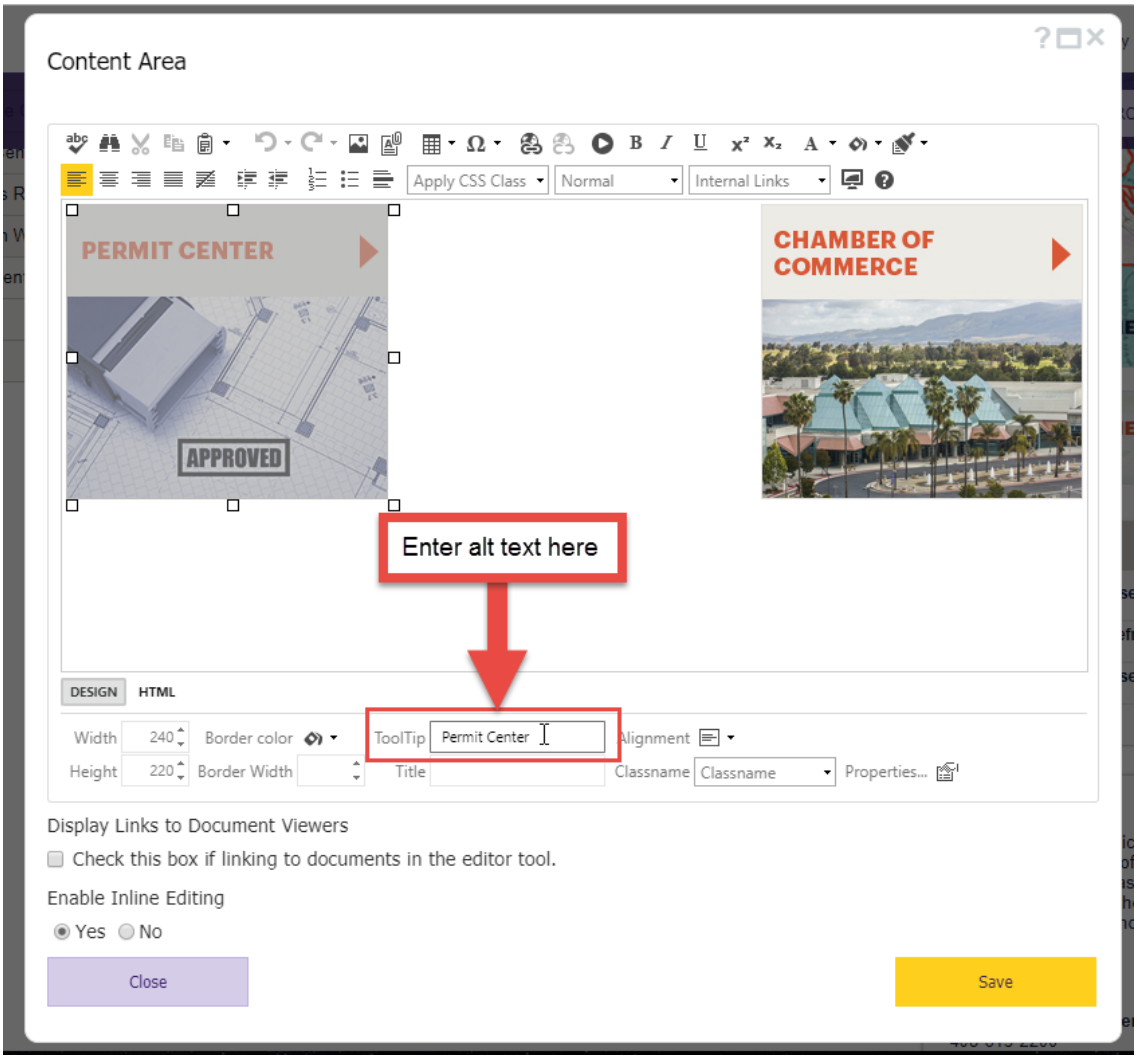
Images must have some sort of description through the alt text or long description. Images with lots of text should be avoided.

a. Include Alt Text for Images with Contextual Meaning.....

This allows screen reader users to benefit from the images included.

How to Add Alt Text

- Click on the image in the CMS editor
- Under **ToolTip**, enter your alt text
- Press **Enter** to apply the change



If an image has text, the alt text must mirror the image text.

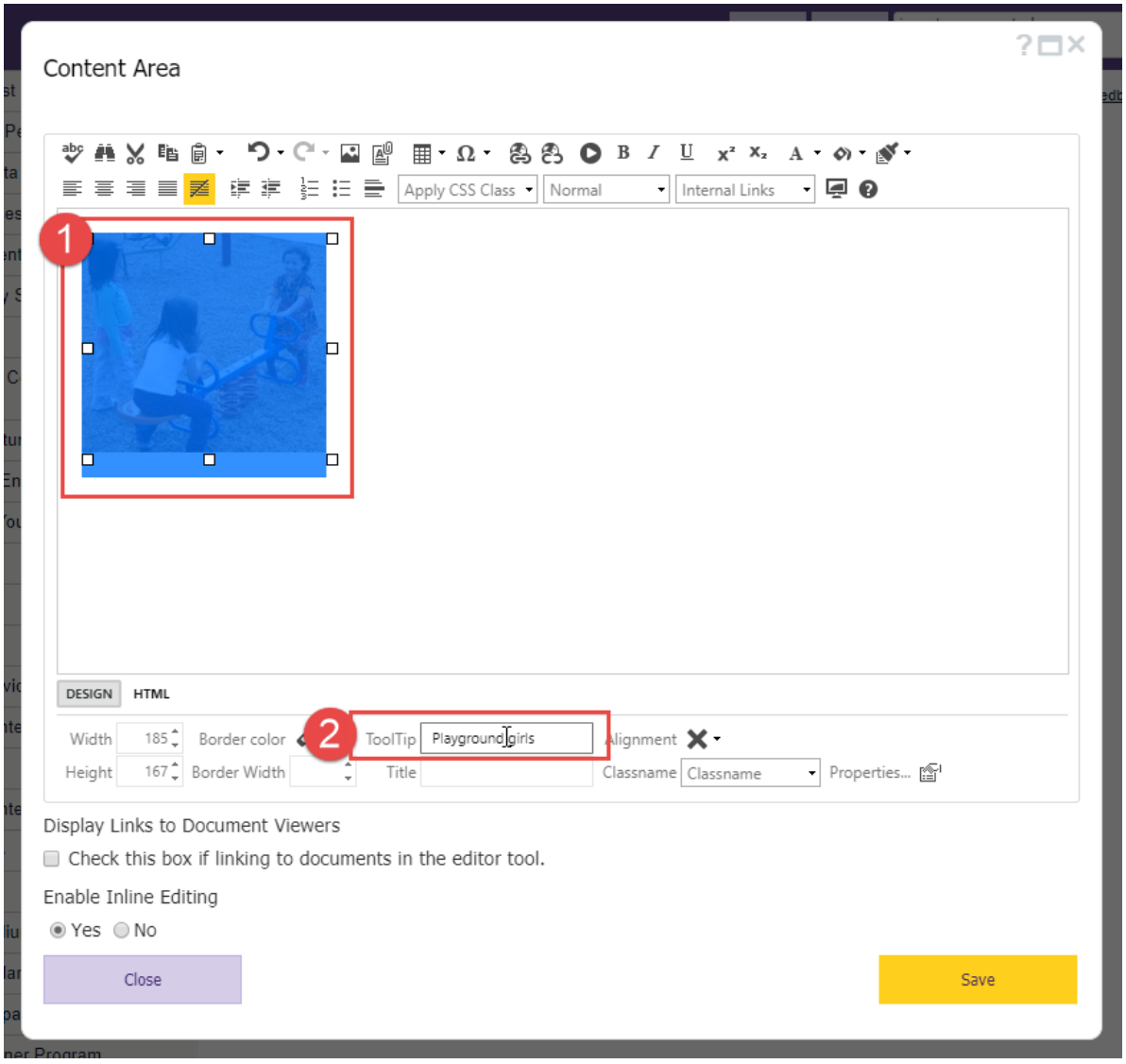
b. Remove Alt Text for Decorative Images .....

A decorative image does not enrich the understanding of the content. Inserting an empty alt tag tells the screenreader to forego mentioning the image. BUT, You will most likely never be adding a picture to a Content Area or Detail area of your website that does not require a Alt Tag.

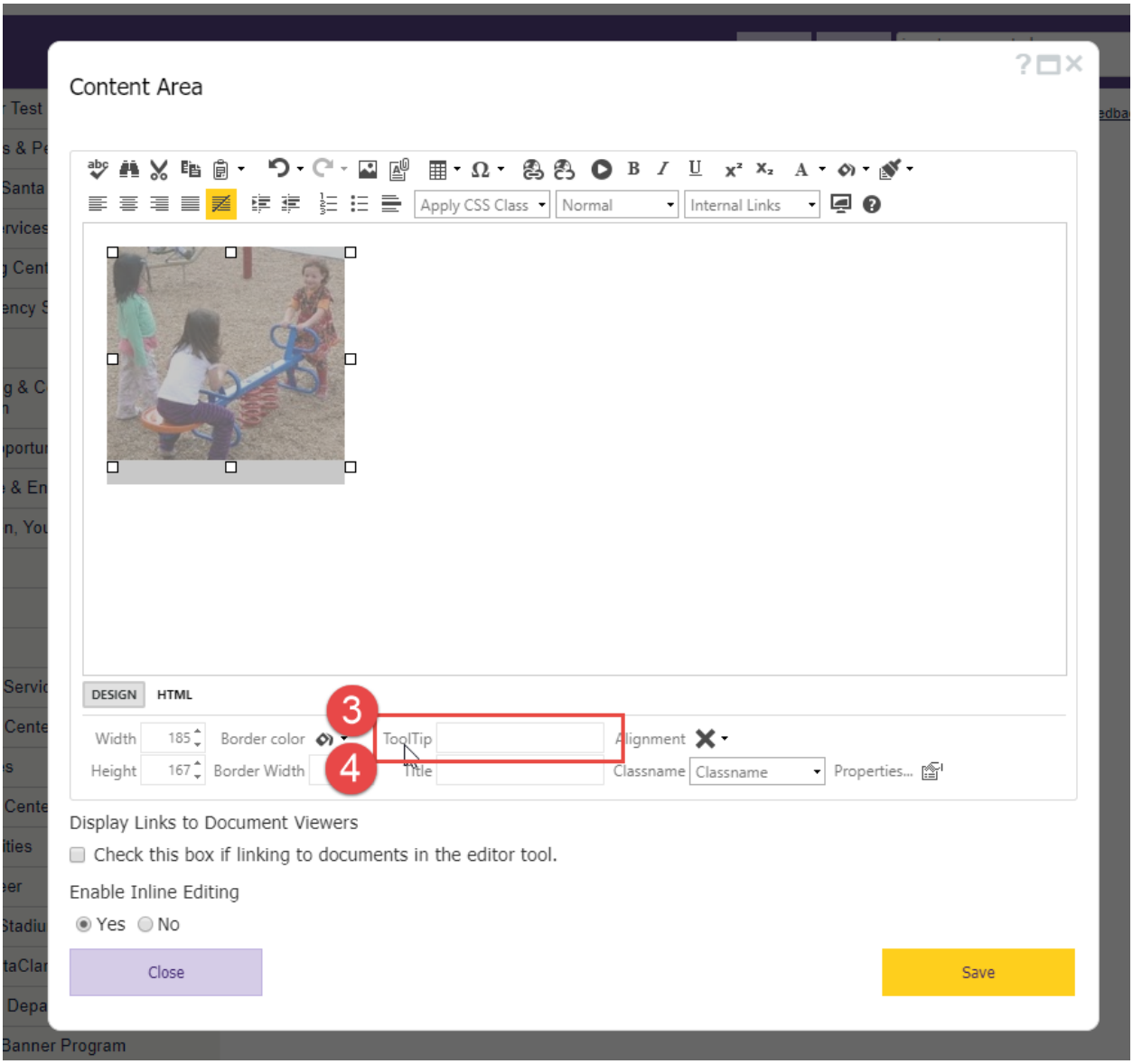
You can add/remove alt text via the ToolTip toolbar in the CMS.

How to Add an Empty Alt Tag via ToolTip

1. Click on the image
2. Place your cursor inside the ToolTip Bar



3. Delete all text within the ToolTip
4. Press “Enter” on your keyboard. This applies the change.


Content Area
Apply CSS Class
Normal
Internal Links
DESIGN
HTML
3
4
Width
185
Border color
ToolTip
Alignment
Height
167
Border Width
Title
Classname
Classname
Properties...
Display Links to Document Viewers
Check this box if linking to documents in the editor tool.
Enable Inline Editing
Yes
No
Close
Save

c. Text in Images and Accessibility

Using images to convey information is against best practice. Screen readers cannot scan text in an image, so alt text must match the text in the image. If this is not possible due to a large volume of text or a complex image, then the following two options may be considered:

1. Create a new page/page section and transcribe the image content
2. Create an accessible PDF for users to download

Resources on Creating Accessible PDFs

- http://webaim.org/techniques/acrobat/
- http://www.section508.va.gov/support/tutorials/pdf/

5. Tables

Tables are great for organizing data. However, when used for aesthetic purposes you may need to rethink your approach to ensure it remains accessible. A key part of ensuring this is to create them using VisionCMS 100% of the time—do not paste them in from Excel or another client.

Pasting tables into the CMS from other sources brings in tags and code that will be flagged by an accessibility checker.

a. Use Tables mainly for Data Organization .....

When we use tables for layout, the flow of information created by headings is interrupted. This makes it difficult for screen readers to parse the different sections and content on a page.

Example 1: Construction Projects Table

Before

Summary of Properties in the Sunridge Specific Plan Area

PROJECT	# OF UNITS/ MASTER PROJECT	# OF UNITS/ PROJECT	HOME BUILDER
North Douglas II	153*	153*	
	*North Douglas II is not part of the Sunridge SPA.		
North Douglas	666		
Village 1		88	Lennar
Village 2		79	Woodside
Village 3		73	Lennar
Village 4		82	Lennar
Village 5		78	Lennar
Village 6		75	Lennar
Village 7		129	Lennar
Village 8		62	
Anatolia I	916		
Anthology		118	Cambridge
Village 1		124	Renaissance
Village 2		106	Morisson
Village 3		26	Winncrest
Village 4		117	Renaissance
Village 5		105	Tim Lewis
Village 6		80	Lyon/Pulte
Village 7		132	US Homes
Village 8		108	Winncrest
Anatolia II	980		
RD-10 Site		99	US Homes
Village 9		152	US Homes
Village 10		117	JTS
Village 11		56	Lyon
Village 12		124	US Homes
Village 13		104	JTS
Village 14		92	Cambridge
Village 15		114	Winncrest
Village 16		122	DR Horton
Anatolia III	798		
Village 17		152	
Village 18		117	
Village 19		56	
Village 20		124	

After

Summary of Properties in the Sunridge Specific Plan Area

North Douglas II

PROJECT	# OF UNITS/ MASTER PROJECT	# OF UNITS/ PROJECT	HOME BUILDER
North Douglas II	153*	153*	

*North Douglas II is not part of the Sunridge SPA.

North Douglas

Number of Units/Master Project: 666

PROJECT	# OF UNITS	HOME BUILDER
Village 1	88	Lennar
Village 2	79	Woodside
Village 3	73	Lennar
Village 4	82	Lennar
Village 5	78	Lennar
Village 6	75	Lennar
Village 7	129	Lennar
Village 8	62	

Anatolia I

Number of Units/Master Project: 916

PROJECT	# OF UNITS	HOME BUILDER
Anthology	118	Cambridge
Village 1	124	Renaissance
Village 2	106	Morisson
Village 3	26	Winncrest
Village 4	117	Renaissance
Village 5	105	Tim Lewis
Village 6	80	Lyon/Pulte
Village 7	132	US Homes
Village 8	108	Winncrest

Anatolia II

Number of Units/Master Project: 980

PROJECT	# OF UNITS	HOME BUILDER
RD-10 Site	99	US Homes
Village 9	152	US Homes
Village 10	117	JTS
Village 11	56	Lyon
Village 12	124	US Homes

Before

This table was used for both data and layout. The problems we see here are:

1. **Too many blank cells** - It would take a lot of time and effort for a screen reader user to access the data in this table, because the screen reader still has to read out each blank cell.
2. **Each main project is made up of smaller project sites** - For example, Anatolia I has: Anthology, Village 1, Village 2...) There is no way for a screen reader to skip cells since the page is not organized in a way that would allow that.

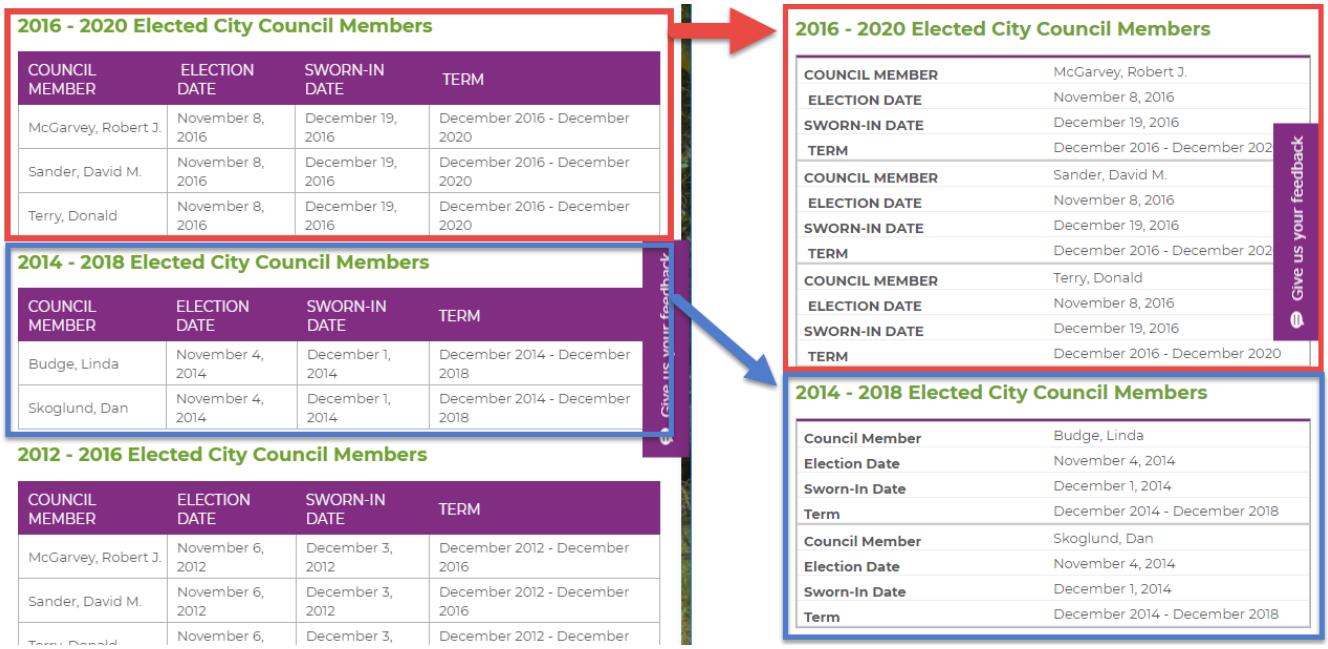
After

In the updated table, headings were used to break up the page into sections so that screen reader users could skip from project to project without having to listen to all of the sites. That way screen reader users have the option of hearing the project details if they so choose.

b. Use a Header Row and Associate with Cells.....

When header rows are associated with cells, screen reader users can reference the header that applies to each cell.

How do you check that headers are defined and associated with cells? The table is fully responsive when you shrink the window size:



In responsive view, the table layout changes, but each header is still referencing the same cell

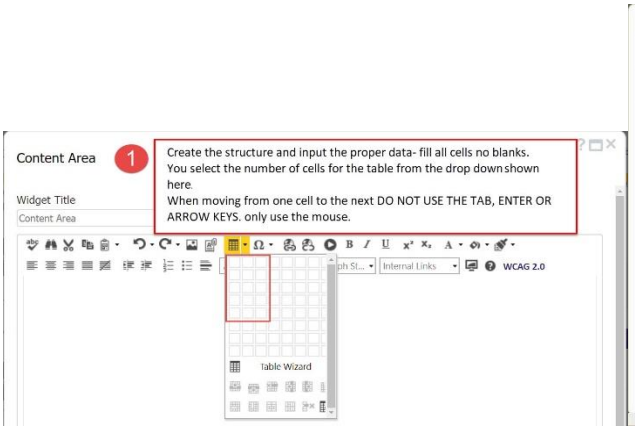
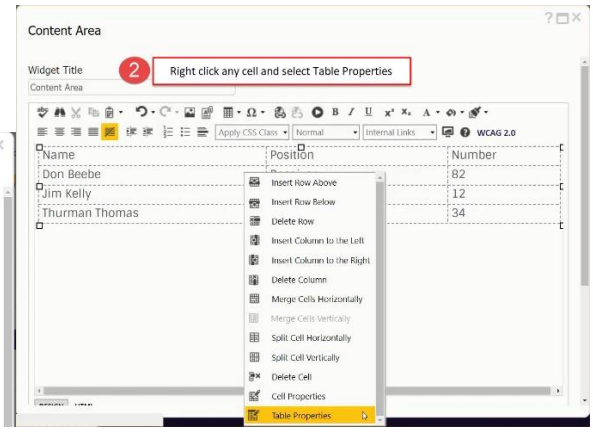
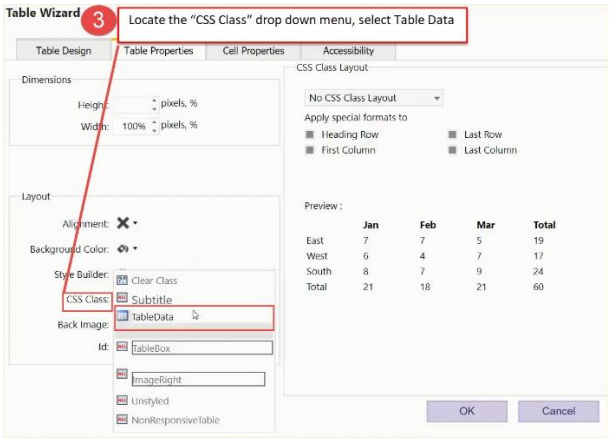
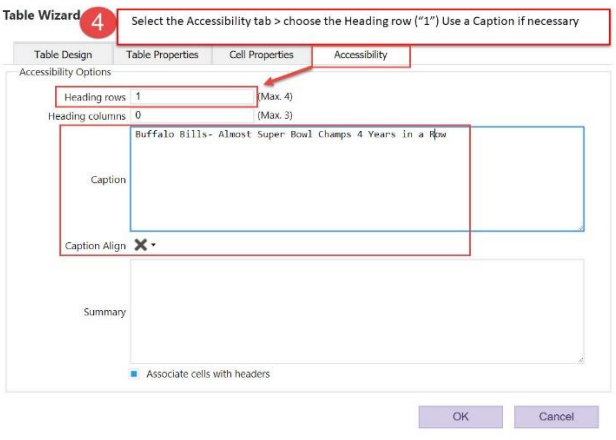
c. Provide “context” for the data in the table……

Table “Captions” provide actual text that gets visually displayed above the table and are read aloud to users, allowing them the choice of reading the table or not.

How to Add a Table Caption

Right click on the table > Table Properties

Go to the **Accessibility** Tab > Enter **CAPTION**- Summary creates redundancy.

d. Use these 4 Stages to create a Data Table .....

1. Create the structure and input the proper data- fill all cells no blanks.
2. Right click any cell and select Table Properties- If the mouse click menu does not appear do not panic this stage can still be completed by clicking in any cell and locating the “Cell Properties” button in a Content Area Widget this is going to pop up at the bottom of the RAD Editor after you click in any cell in the table. – then select the “Table Properties” tab
3. Locate the “CSS Class” drop down menu on the bottom left side of the available options, select Table Data
4. Locate the Accessibility tab – choose the Header row (most often it is row “1”) Type in a Caption Unless the content within the data table is easily understood based upon the headers and context of the page.