RESEARCHING THE HISTORY OF YOUR PROPERTY: PART 1, SANBORN FIRE INSURANCE MAPS

Introduction

Researching the history of your home or place of business can be quite an interesting experience. Whether you're doing it for your own enjoyment or as part of a project, it's nearly always a fascinating dip into the past, and old maps are one very good way of gathering information on the past character and evolution of a property. Although researching the history of your property can be challenging, there are now a large number of online resources that can make this work much easier and more convenient.

This document provides you with a quick summary of how to research an urban single-family house or industrial building constructed before 1960, using online Sanborn Fire Insurance maps. The example buildings are in Columbus, but you could use this research process to investigate properties in other Ohio cities. The maps are also very useful for tracking the initial development and evolution of a particular street, subdivision, or neighborhood.

What Are Sanborn Fire Insurance Maps?

Sanborn maps were made by the Sanborn Fire Insurance Map Company, starting in 1867 and continuing up until about 1970 (see Figure 1 for a sample map.) Insurance companies across the United States used these maps to assess risk levels, and the maps show outlines of buildings for various cities and towns, including information such as building height, porches, windows, and construction materials, plus other various features. Purely utilitarian in their time, these maps are now an important historical record of the development of America's cities and towns in the nineteenth and twentieth centuries. For most communities in Ohio, the Sanborn maps that are available will range in date from the 1880s through the early 1950s. And online collections of Sanborn maps now allow researchers to collect information on older buildings without going to libraries or archives.

What Do the Sanborn Maps Show?

The Sanborn maps display a basic outline of the building as it existed at the time when the map survey was completed. Also included are various features of the building—such as windows, porches, chimneys, and building materials—which are shown on the maps through a combination of words, numbers, and symbols.

The maps can be useful for viewing the original footprint of a building and for noting when any additions were built, and they can be excellent indicators of how the area around the property developed over time, in terms of such conditions as whether a house was one of the first or last homes to be built on its street, or whether many of the houses on the street had additions. You can also discern trends, like when former residential properties were converted into commercial storefronts.

For factory complexes, Sanborn maps often included the name of the business plus information on the buildings and the industrial equipment inside, at times listing the construction date. The maps of factories are often quite detailed and make an excellent resource for tracing the growth of an industrial plant and noting any changes that occurred later in the history of a factory.
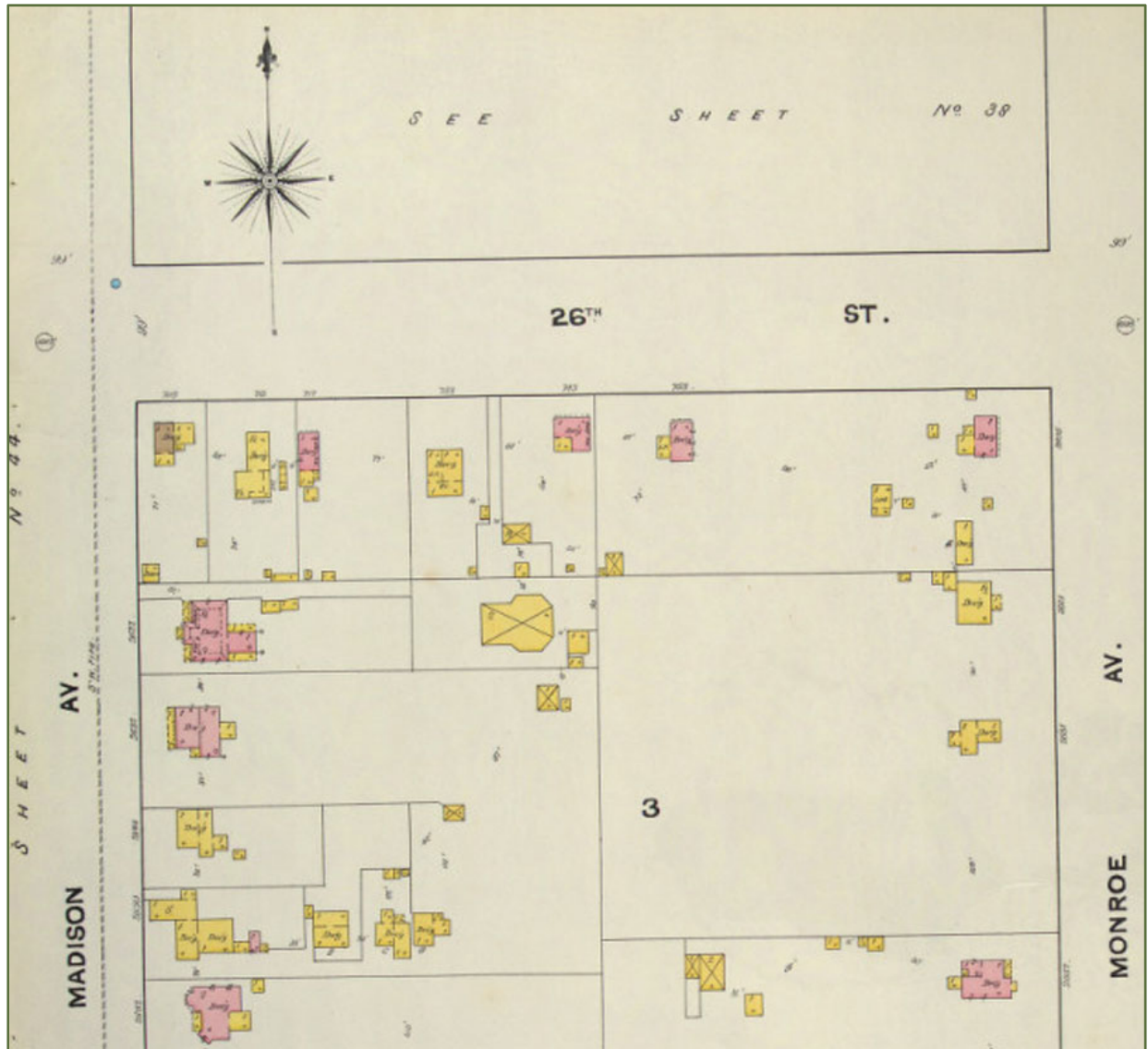
Figure 1. A fairly typical color Sanborn map sheet, covering a portion of Ogden, Utah, in 1890
(Source: the J. Willard Mariott Library, University of Utah, http://content.lib.utah.edu/cdm4/az_details.php?id=0)

Organization and Format of the Maps

From the nineteenth century through about the 1950s, Sanborn maps were produced in large bound volumes. A summary map in the front of the volume showed the city being covered, and the map showed how the city was divided into individual numbered map sheets. You could then look up the map sheet by number and find a specific property. Major cities like Columbus, Cleveland, Dayton, Toledo, and Cincinnati had multiple volumes. So, for example, for a large city, the west portion of the city may have been in Volume 1, the central and north ends in Volume 2, and the city's east end in Volume 3.

The original volumes survive in archives and libraries and are sometimes available to the public, but the size of the volumes is large (map sheets are often at least 21" x 25"), making it hard to place the maps on a photocopier or a stationary flatbed scanner. If you are working with these original Sanborn volumes, a good

approach (if the library or archive allows it) is to either use a small hand-held scanner or take a digital photograph of the map sheet using a camera with a macro setting.

As mentioned above, an extensive collection of Ohio Sanborn maps are accessible online, courtesy of the Ohio Public Library Information Network (OPLIN). If you are from a state other than Ohio, your local public library or university library may also have an online collection of Sanborn maps.

How to access the OPLIN Sanborn maps is explained below. Be aware, however, that the online versions have some limitations—the maps are reproduced in black and white, so the original color coding used on many of the maps will either not show up at all or will show up as shades of gray, sometimes dark enough to obscure printed information about the building.

Researching a Property with Sanborn Maps
Using the Ohio Public Library Information Network (OPLIN)

You can view an online collection of the Sanborn maps for Ohio through OPLIN, a website that contains collected resources of public libraries across Ohio. Access to the maps is mainly through word searches, so the best way to look up a property is usually by a street name.

Below is a very brief summary of the research process. Two example searches are included at the end of the document to help illustrate the process. The first example is for a residential building and will include detailed steps and screen shots so that the discussion serves as a how-to exercise. The second example is for an industrial building, and there the emphasis is less on the detailed steps and more on the research strategy. So, in a nutshell, the general process is as follows:

1. **Get a current map of your property** and the surrounding properties to compare with the Sanborn maps. If you are in Franklin County, you can go to the Franklin County Auditor website for this. More detail on this on page 7, under Example 1.

2. **Search for online Sanborn maps** using OPLIN at http://dmc.ohiolink.edu.proxy.oplin.org/oplinmap.htm. (You may have to enter your zip code first.) Detailed screens are given in Example 1, but here is a summary:

   a. The main screen will present a search box where you can enter text. The maps are set up so you can search for words that appear in the maps. For a business, if you know the original name of the business, you can enter that (such as *Watson Boxboard Company*). If you are researching a house, apartment building, or commercial building, you may need to enter the name of the street that the building is located on or maybe a nearby cross street. That's the method we'll use in both of our examples.

   b. The next screen shows you a series of map listings that the search engine has found with the keyword you entered. The listings are arranged alphabetically by city, so you'll have to scroll through the entries until you reach your city. Once you find the city you want, the map entry should list which addresses on each street are covered, and you should be able to use your address to locate your property.

   c. When you find the map you want, click on **view map** to see the map. The map dialog box will have controls where you can shrink and enlarge the map, and zoom in and out. There will also

be maps from different years; typically for Ohio cities, the earliest Sanborn maps will date from the late 1880s or 1890s, and additional map volumes were produced from 1900 to about 1929. Sanborn also took some of the 1920s map volumes and updated them in the 1940s and 1950s to show changes that had happened in the 1930s and 1940s.

3. **Compare the maps** with each other and with the existing conditions of the house. You may notice differences, such as the removal of a porch, or the construction of an addition on the rear of the house. Stables, carriage houses, and garages also often tend to appear and disappear over time on Sanborn map sheets. For example, for a small house built in 1880, the property may have started out with a small stable at the rear of the property that might be visible on an 1885 Sanborn map sheet. By the publication of a new edition in 1912, the stable may have been demolished so no building appears at the rear of the property. By the publication of a third set of Sanborn maps in 1927, an automobile garage might show up at the rear of the property.

Additional pointers:

For Small or Rural Communities

– Sometimes Sanborn grouped small communities in with larger cities. For example, the Sanborn maps for the Village of Gambier, a small college town in Knox County, Ohio, were included in the volume of Sanborn maps for the nearby larger town and county seat of Mount Vernon. So if you were researching original bound Sanborn maps at a library, you would not find a Sanborn volume for Gambier; you would have to look in the Mount Vernon volume. Keep this in mind if you use the original Sanborn maps rather than the online versions.

If you use the online OPLIN Sanborn index, you should be able to access the Gambier maps through the word search, even if the original Gambier maps were grouped in with the Mount Vernon map books. If you enter **Gambier** into the word search box, the search engine displays all of the Mount Vernon volumes that have maps of Gambier, so it's easy to find the maps this way even if the community you are researching is small.

– If your property is in a rural area or a very small community, or perhaps on the outskirts of a city in an area that was not yet heavily developed, Sanborn may not have mapped the area you are looking for and may not have maps of your property.
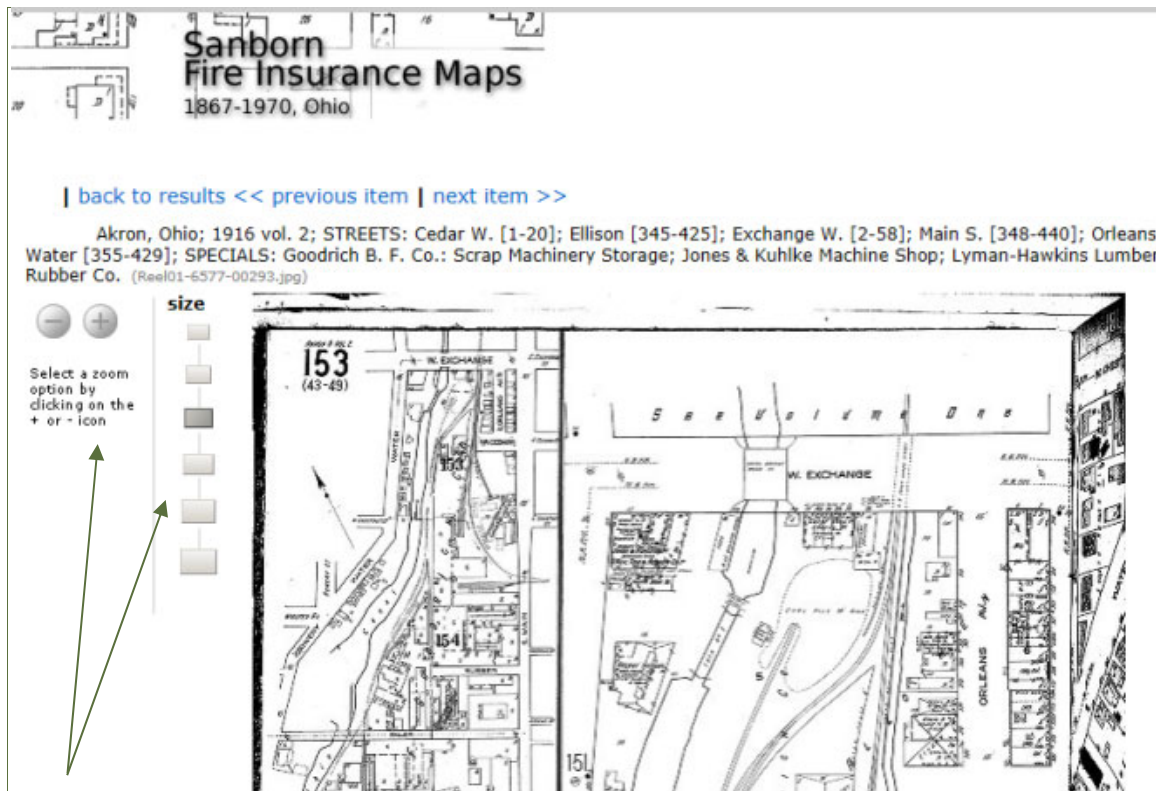
For Renumbered Addresses

For houses and commercial buildings, some cities renumbered their street addresses at some time in the past. There is some possibility that if your house is listed as 134 Elm Street today, it may have been different in the past. You can make sure you have the right property by looking at the distance between your property and the nearest cross street. Even if the address number has changed, if your building is on the third lot from the intersection, you can confirm that the house you are looking at is the third from the intersection, as long as smaller parcels of land were not joined together at some point. It is a very good idea to compare the Sanborn maps to a current map of your street (which you can get from the Franklin County Auditor's GIS map website; see below for instructions).

Saving and Printing the OPLIN Sanborn Maps

Once you have the map you want, you can zoom in, using the plus (**+**) button to the left of the map. Then click the left mouse button and select **save picture as**. In the dialogue that is displayed, you can give the file a name and save it in the appropriate location on your computer.

You cannot make the map larger or smaller on the saved or printed display. However, you can change the size of the map on the screen and vary the resolution: if you make the map larger on the screen, you'll get a better resolution when you save the picture; if you save the image while you have a smaller version of the map on your screen, the resolution may be fuzzy. There are six rectangles that represent the size of the map image (see image at right), and the second or third box from the bottom is often the one that works best when you are saving the image.

Sample partial page showing the buttons that let you zoom in and out of the map, and the sizing rectangles that let you change the size of the image. We have found it best to set the size to the second or third button from the bottom to get the best resolution when you save the image.

Reading the Maps

The Sanborn maps have a key that shows most of the symbols likely to appear on a typical map. A color version of this key is reproduced in Figure 2 so you can see the symbols and the colors that would appear on an original Sanborn map. A black and white key is available at
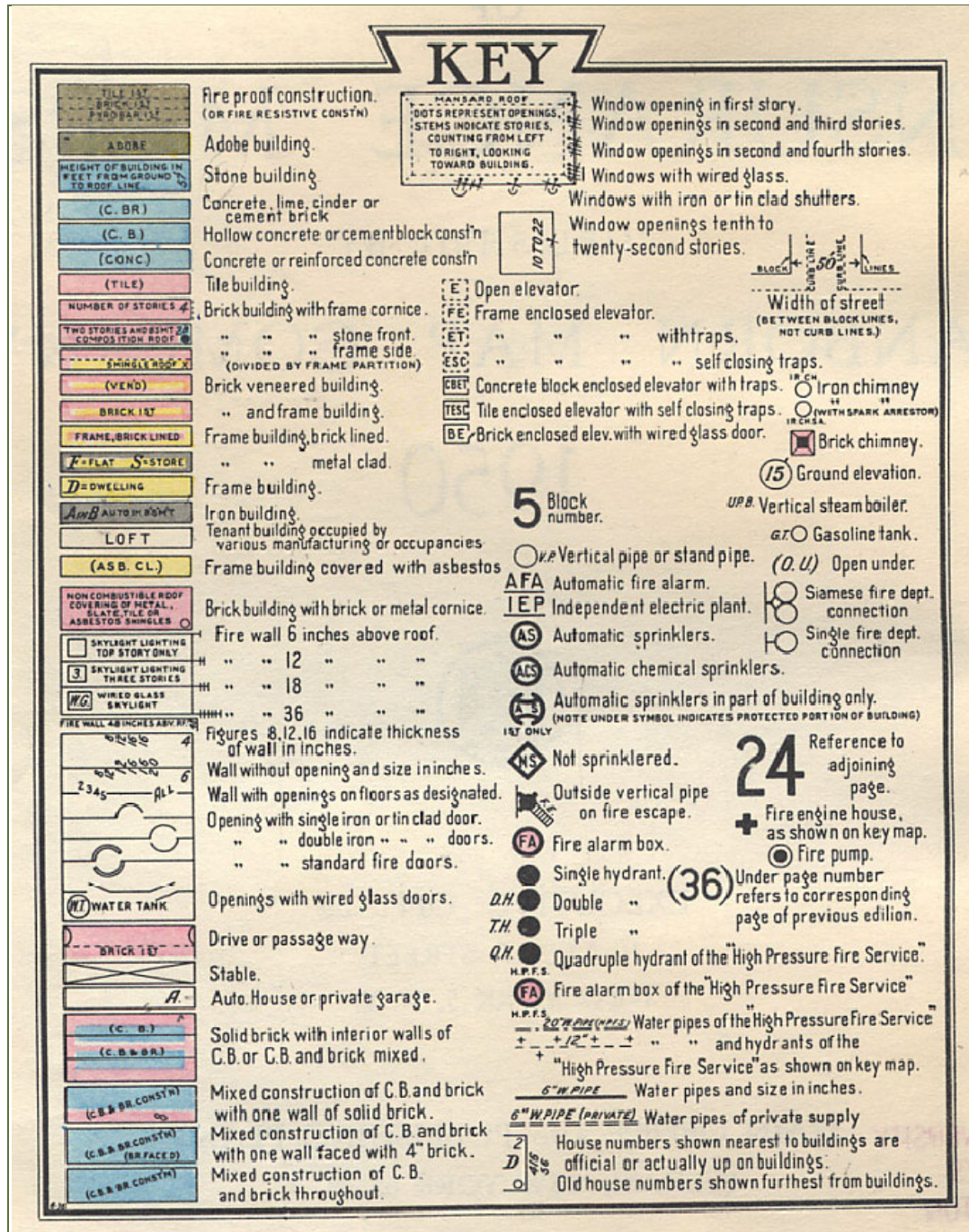http://sanborn.umi.com/HelpFiles/key.html.

Figure 2. A color Sanborn map key, showing the different colors used to code building materials on the original maps.

The colors above do not show up on the OPLIN Sanborn maps because the online versions are black and white, although sometimes the pink and blue tones show up as gray on the OPLIN maps.

The key shows the many symbols used on these maps to represent building function, construction materials, features like chimneys, windows, and porches, doors, elevators, and various types of fire-suppression equipment. The code also indicates if the building was constructed in a way that was considered fire resistant at the time the map was made.

Source: http://lib2.pratt.edu/uploads/files/ColorSanbornLegend.jpg

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Architecture * Historic Preservation * Planning

Example 1: 1237 Neil Avenue

For this guide, the owners of the **Neil Avenue Bed and Breakfast** at **1237 Neil Avenue** in the Victorian Village neighborhood of Columbus have allowed us to use their property as a research example. Below we will go through the process of researching this house using Sanborn maps, step by step, as an example of how the process works. So for this first example, we'll provide more detailed instructions with screen shots; in the second example, we'll use more of a summary version.

1. Get a current map of your property and the surrounding properties

We obtained a Franklin County Auditor map showing 1237 Neil and the surrounding properties, to use as a baseline for comparing modern conditions with the Sanborn maps. The map was obtained at the auditor website by entering the address of the property (procedure given below[1]). This information is freely available to the public. Many other large Ohio cities have online real estate mapping websites.

a. Go to the Franklin County Auditor Real Estate web page at
   http://www.franklincountyoh.metacama.com/altIndex.jsp

b. On the Quick Links menu at the left of the page, under **Property Search**, click **Address**, and you'll get a screen where you can enter the street name and house number (in this example, **1237** for the number and **Neil** for the street).

c. Enter the information and click the **Search** button. The next page displayed is a **Summary** page with information about the property.

d. On the side menu at the left of the page, click **Map(GIS)**, which will display a GIS map with your property highlighted.

e. Use the **Zoom IN** and **OUT** bars at the immediate left of the map to zoom out of the map until you can see the property you are researching as well as the properties around it, including at least one street that intersects with the street of the property. The resulting map should look something like Figure 3.

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[1] Web pages are often changed or reorganized. These instructions are current as of January 2012.

Figure 3. Franklin County Auditor Map of the intersection of Neil Avenue and West Fifth Ave., showing 1237 Neil Avenue.

Some information on property ownership has been deleted from this image to protect the privacy of the property owners. The highlighting of the property is difficult to see on this screen shot, so we've added a black dot to identify the property.

2. Search for online Sanborn maps using street names

a. The OPLIN Sanborn maps are at http://www.oplin.org/sanborn

Typically, to get to the main page, you'll be asked to enter your zip code. At the main page (shown below), you'll see a search box.

b. In the search box, enter the name of the street for your house, or the nearest cross street. The checkbox to the right of the search box should be set to **Full Record** (and not City/County).

Whether you use the name of the street that the house is on or a cross street depends on how unique the street names are. If you enter a numbered street like "Fifth" (for Fifth Avenue), be aware that many streets across Ohio are named "Fifth," and so thousands of map entries will be returned, and you will need to sort through them.

Streets named after people or other locally specific terms will usually result in a smaller number of entries and may be easier to deal with. For example, the house we are using as an example is on Neil Avenue, and there are far fewer streets in Ohio with that name than Fifth Avenue, so **Neil** is a better search term.

c. After you enter your search term, the search engine returns a series of entries for every map sheet that contains that name. The list is sorted alphabetically by city, with entries for cities like Akron appearing first. Since **Neil** does not appear on a large number of maps, our Columbus map entries are on the first page of entries, after several map entries for Akron and Chillicothe. The map entries are arranged by date, so in this case, the 1887 edition is listed first, followed by 1901 and then 1922. Later maps with pasted-in updates (1951 for Columbus) are listed last. The first entries for Columbus, Ohio, for **Neil** are shown below.

A series of blue numbers at the top of the page allows you to navigate through the entries until you reach the map listings for the city you want. You can also click on the blue words **previous** and **next** to navigate through the pages.

Each map entry has a **Description** section that lists the street and house numbers covered on the map. We will need to see if a map covers the 1200 block of Neil Avenue. However, the highest address number entry for Neil Avenue from 1887 looks like this: **Neil [115-245]**.

Evidently, the Sanborn Company did not map Neil Avenue past the 200 block in 1887. Given that coverage only extends to the 200 block, it is likely that the 1200 block had not been developed at all at this time. Since not enough development existed in 1887 for Sanborn to map anywhere near the 1200 block of Neil Avenue, it is unlikely that 1237 Neil Avenue was built in 1887 or earlier.

d. Now that we have determined that 1237 Neil Avenue was not mapped in 1887, we need to turn to the next series of Sanborn maps for Columbus, which is the 1891 edition. On the map entries for the 1891 Sanborns, the highest address range is **Neil [701-747]**.

This suggests that development was moving rapidly north on Neil Avenue in the late 1880s and early 1890s, but major residential development had extended only up to the 700 block by 1891. Judging from the lack of Sanborn map coverage, it is possible that the 1200 block of Neil Avenue was completely undeveloped in 1891 or that it had only a small number of houses built at that

time. If the area had only two or three houses, it may not have been mapped by the Sanborn Company, since there were too few properties to justify making a map. Based on this information, 1237 Neil Avenue was probably not built yet in 1891, but if it happened to be one of the oldest houses on the street, there is a small chance that the house might have been built by 1891 but was just not mapped by Sanborn at that time.

e. Once we have established that no Sanborn maps showed the house in 1887 and 1891, we can move on to the next set of maps, which dates to 1901, and repeat the search for the address range. One of the 1901 map entries has this reference: **Neil Ave. [1090-1317]**.

Since our house is at 1237 Neil Ave., this map should have the house on it. Click on the blue **view map** above the map entry to display the map sheet.

view map
Title
 Columbus, Ohio
Display Date
 1901 vol. 1
City/County
 Columbus, Franklin
Description
 STREETS: Fifth Ave. W. [237-372]; Forsythe Ave. [1181-1337]; Fourth Ave. W. [256-394]; Harrison Ave. [1091-1276]; **Neil** Ave. [1090-1317]; Pennsylvania Ave. [1198-1349]; Sixth Ave. W. [233-275]; Sixth Ave. W. [276-361]; SPECIALS: **Neil** Ave. U. P. Church
 Sanborn Maps

1237 Neil Avenue is indeed on the map (see Figure 4). We can identify it by comparing it to the Franklin County Auditor map and seeing that it is on the fifth parcel south on the west side of Neil Avenue, south of the intersection with Fifth Avenue. We can also tell by the address label, since the number **1237** is printed in front of the house, and the City of Columbus has not changed address numbers in this area.

f. You can enlarge the map by clicking on the gray rectangles to the left of the map (see page 5). Use the long gray bars to the right and below the map to navigate around. The round gray buttons with the plus (**+**) and minus (**-**) signs to the far left will allow you to zoom in on the property you want: to zoom in or out, just click the appropriate button and then click on the part of the map that's relevant.

g. You can print the file, or you can save the map as a jpeg image by left clicking and choosing **save picture as** (see page 5).

h. Once you are done printing or saving, click the blue letters at the top of the screen for **back to results,** and you can search for later Sanborn maps of the property using the same method. When you have printed or saved all of the maps, you can compare them to see how the property changed over time.

Using this procedure, we were able to find two maps showing 1237 Neil Avenue: one from 1901 (Figure 4, mentioned above) and a second one from 1922 (Figure 5).

Figure 4. 1901 Sanborn Insurance map showing the intersection of Neil Avenue and West Fifth Avenue, Columbus, Ohio

1237 Neil Avenue is visible on this map near the lower portion of the center of the map. It is on the west (left) side of Neil Avenue and is on the fifth lot south of the intersection with West Fifth Avenue. Notice that by 1901, the neighborhood appears fairly heavily developed with houses and commercial buildings. Buildings with the letter **D** inside them represent dwellings (single-family houses), while commercial buildings are marked with the letter **S** for stores, and apartment buildings are labeled with an **F** for flats. The map indicates that this area in 1901 was primarily filled with single-family houses, with some commercial buildings on West Fifth Avenue east of Neil Avenue.

Figure 5. 1922 Sanborn Insurance map showing the intersection of Neil Avenue and West Fifth Avenue, Columbus, Ohio

1237 Neil Avenue is visible on this map and has not changed from the 1901 map, except that a second story has been added to the rear porch. A review of the overall map shows that the neighborhood's land use has not changed much since 1901, and the area is still composed primarily of single-family dwellings. In some older neighborhoods with houses of this size, the large single-family dwellings had begun by the early 1920s to be divided into apartments, but this does not appear to have happened here. The map also reflects some of the color-coding of the original Sanborn map sheets. Buildings that appear white on this map are probably wood-frame facilities, which would have been colored light yellow on the original map sheet, while the properties that appear as gray or black would have been colored pink, indicating that they were built of brick.

3. Compare the maps with each other and with the existing conditions of the house

As mentioned above, Figure 4 and Figure 5 show the maps we were able to find for 1237 Neil Avenue. If we were using the maps to get an idea of the construction date of the house, we would have found that no map coverage existed for that part of the street for 1887, and so it is likely that the house was not built then, although it is possible that it was built when that part of the street was first being developed. However, the house does appear on the 1901 Sanborn map, so we know for sure that the house was completed by 1901.

By comparing the 1901 and 1922 maps, we can see that the basic outline of the house has stayed the same, but some small changes were made between 1901 and 1922. For example, a box on the rear of the house represents a wood-frame porch. The box has a small number one (1) on the 1901 Sanborn and a number two (2) on the 1922 Sanborn. These numbers refer to the number of stories of the porch. The difference in numbers indicates that a second story was added to the rear porch between 1901 and 1922. Otherwise, the details of this house look much the same. Other properties will have had larger additions over the years, causing a larger number of changes to show up on the Sanborn maps.

Example 2: 515 W. First Avenue

For our second example, we've used an industrial building that housed a foundry established in 1921. The building was located in the Harrison West area of Columbus until it was demolished in the mid-2000s. This example demonstrates the information available on industrial properties, and it has a somewhat more complicated search process, so it will also serve to illustrate some of the complexities that can arise with Sanborn research. Sometimes it works out that the first map you find is a later (possibly 1950s-era) one, and then you might use clues from that later map to work backward to find earlier maps that did not show up on the first search.

Since the building on First Avenue has been demolished, we could not begin with a Franklin County Auditor map. But we knew the address of the property had been 515 W. First Avenue, and we knew that the nearest cross street was Ingleside Avenue. We chose **Ingleside** for our search term (since it was much less common than **First**) and came up with a map from 1922 (map entry shown below) whose description included both **Ingleside Avenue** and **First Av. W. [504-548]**:

The building at 515 W. First Avenue shows up on the 1922 map (Figure 7) and is labeled as the Robinson Optical Company, manufacturer of optical instruments. Some additional text written inside the building is not legible, since the shading inside the building was scanned in as almost black on this building, obscuring the text. However, the large title appears to read "machine shop." Also, the small, nearly square portion of the building on the south side is clearly labeled as an "aluminum foundry."

A second similar map also appears in the search results, this time a 1922 Sanborn with 1951 updates (Figure 8). The function of the property has changed by this time, and the facility is now labeled as the factory building of the Columbus Specialty Company, manufacturers of leatherette novelties. The building includes a long rectangular north portion, a nearly square south portion, and a long and narrow stock-room wing extending to the east. Also on the property are several small buildings, and a small building to the east of the aluminum foundry is labeled as a "testing room." Note that the two-story duplex residence that appeared on the northeast corner of the property in the 1922 map no longer exists.

The 1922 map was the earliest map we found for the property when we entered **Ingleside** into the search engine, but we also want to double check for any earlier Sanborn maps that might have covered the site. We noticed on the 1922 map that the label "Ingleside Av." is followed by "(Factory)," which indicates that Ingleside Avenue was in the past known as Factory Avenue and may explain why earlier maps did not surface when we used **Ingleside** as the search term.

The next step then is to search for a term using **Factory**. If we enter just that word, the search engine would likely return every map in the collection that contained a factory, and the number of maps to sort through

would be overwhelming. So we can instead enter **Factory Av** to see if earlier maps will show up. A 1901 map entry comes up that contains **Factory Av [901-967]** and **First Av. W [505-540]**.

The 1901 map (Figure 6) shows the site of the building, but the land is empty except for the two-story duplex residence visible in the 1922 map. Therefore we can conclude that this industrial building was constructed sometime after 1901 and before 1922.

To summarize, we were eventually able to find three Sanborn maps for this property: a 1901 map (Figure 6), a 1922 map (Figure 7), and a 1922 map sheet updated to 1951 (Figure 8).

- The 1901 map showed us that the industrial building had not been constructed yet and the land was empty at that time, except for a residential duplex on the northeast corner of the site.

- The 1922 map shows us that by that time, the masonry north portion of the building had been constructed and contained a machine shop for an optical instrument company, and a wood-frame south wing of the building contained an aluminum foundry.

- The third map shows that the building was in use by 1951 by a factory that made leatherette novelties. The 1951 map also shows that a small wing had been added on the east side of the building, a series of small support buildings had been constructed on the property, and the residential duplex at the northeast corner of the site had been demolished. It is not clear if the foundry still existed at that site somewhere, or if it moved and returned later.
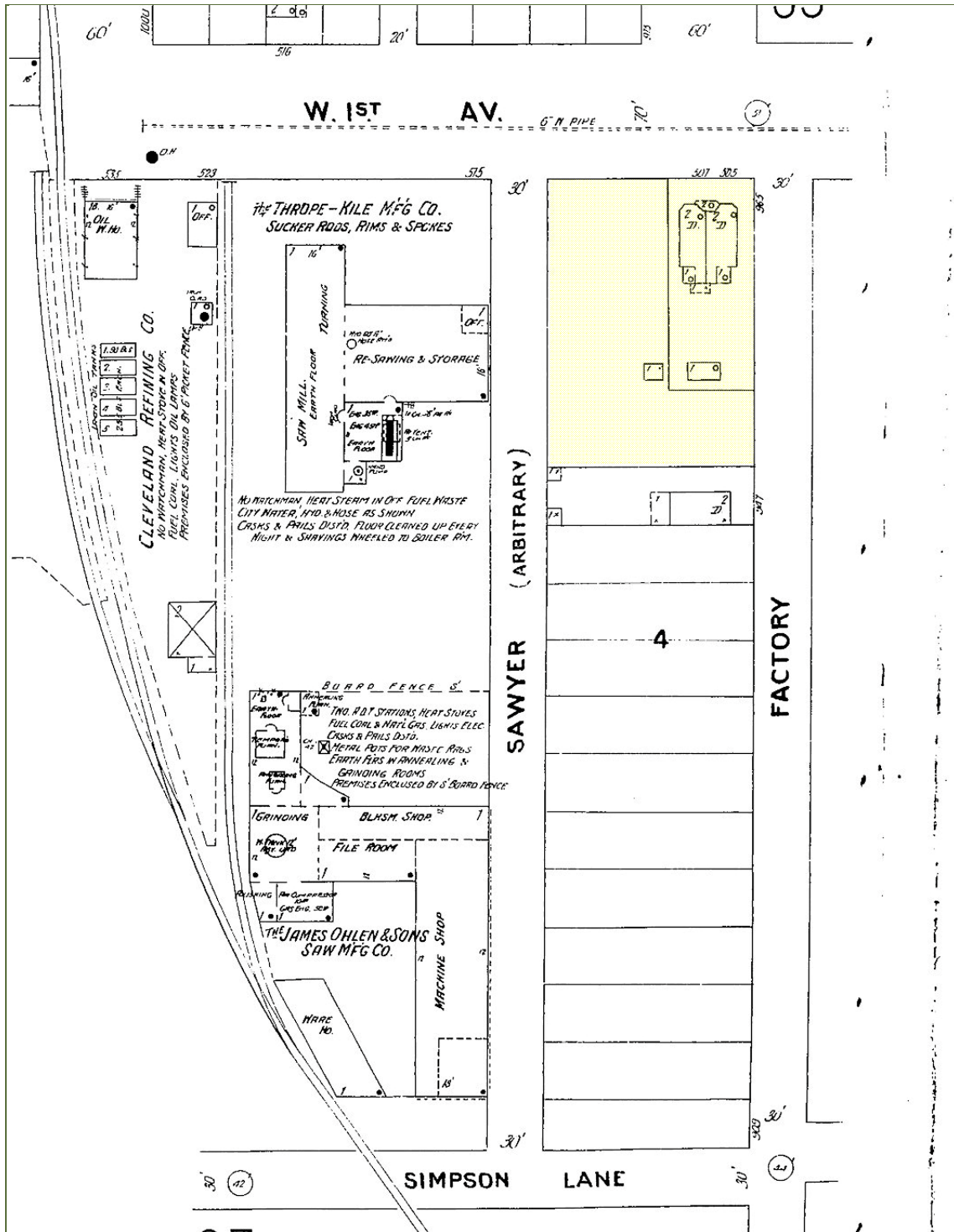
Figure 6. 1901 Sanborn map, corner of W. First Avenue and Factory Avenue

The site near the upper right of the map (highlighted in yellow) is the site that would become 515 W. 1st Ave. On this map, a two-story duplex at 505-507 W. First Av. covers a corner of the site, but the industrial building that would later occupy this site has not yet been built.
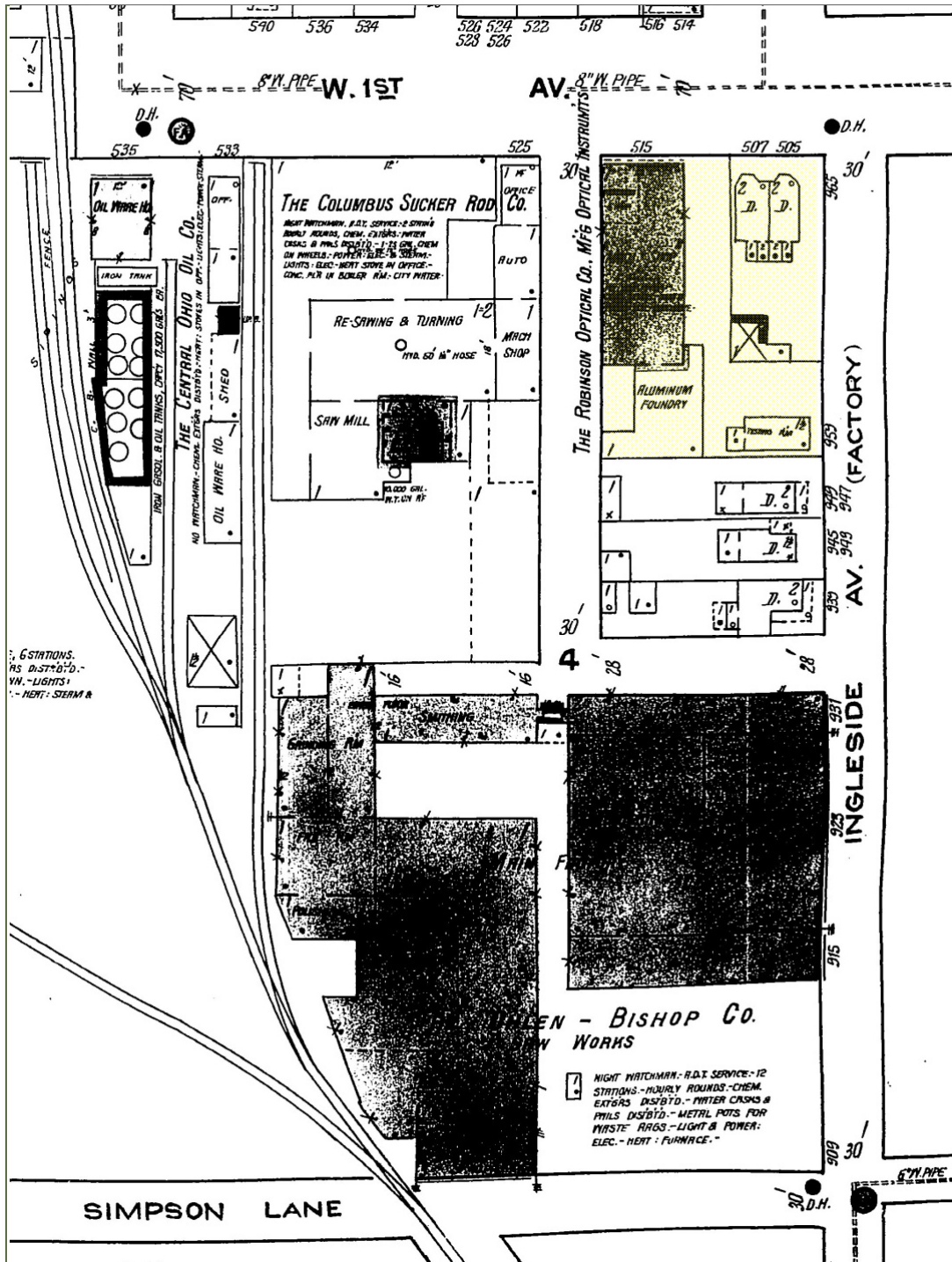
Figure 7. 1922 Sanborn map, corner of W. First Avenue and Ingleside (Factory) Avenue

The building now shows up at the upper right hand corner of the map (highlighted in yellow) as the Robinson Optical Company. Note that the duplex residence at 505-507 W. First Av. is still at the northeast corner of the site. Also note that an aluminum foundry is indicated in the south portion of the building, and a nearby house to the east of the foundry is labeled as a testing room.
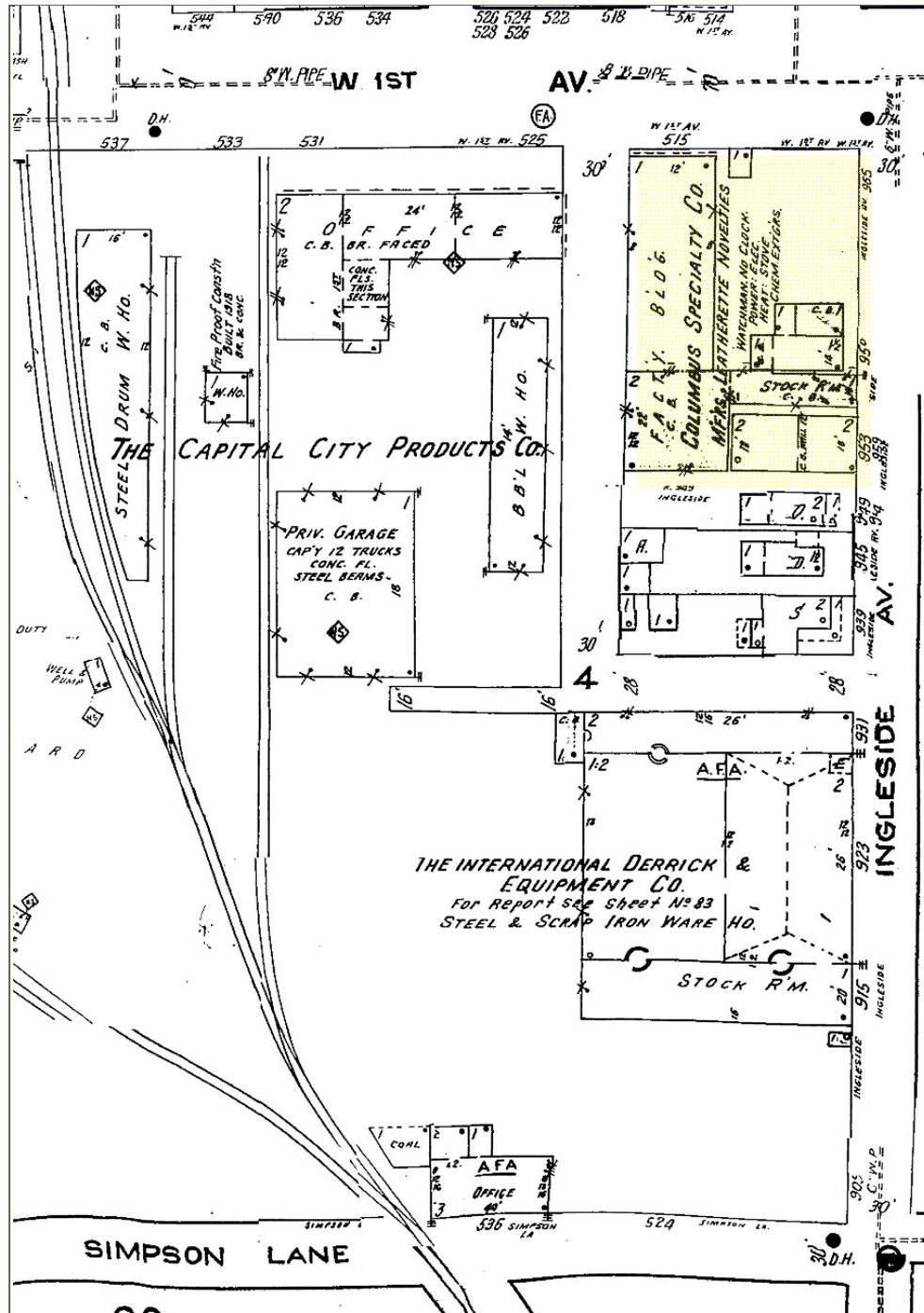
18

Figure 8. 1922 Sanborn map with 1951 updates, corner of W. First Av. and Ingleside Avenue

The building at 515 First Avenue is now the Columbus Specialty Company factory, and a stock room has been added to the east side of the building. Also note that the duplex at 505-507 W. First Avenue has been removed from the northeast corner of the site, and several small support buildings have been added to the factory complex. Other changes have occurred in the surrounding area to the west and south of 515 W. First Avenue.

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Conclusion

We hope you've found this guide to be of good use. Looking at Sanborn maps can be a superb way of learning not only about your specific property but also about the growth and development of your neighborhood, city, or town. For more information about historic preservation or cultural resources management, please feel free to contact one of our historians or cultural resources management specialists—we're always happy to help!