MANCHESTER | URBAN DESIGN | LAB

MUD-Lab Toolkit
CHARACTER STUDY

Character areas are an important tool in helping to deliver contextually responsive urban design, allowing the urban designer to understand and respond to the unique qualities of any particular site or neighbourhood. It is a common technique used throughout the built environment profession, but does require careful balancing of a number of different variables and features. This toolkit explains the role and purpose of these studies and then goes on to offer step by step guidance and advice as to how you can undertake a character study and present it in a professional manner.

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A   What is a Character Analysis?

Every town or city has a distinctive or unique character, or characteristics. Much like humans, who all have an individual character, which is a mix of their physical appearance, their mannerisms and their emotions, **cities to have a character**. Whilst the physical attributes of a place are critial (e.g land use or urban grain), urban character is also a product of the way that people use or relate to the space (e.g legibility or presence of gateways). There is no one urban design theorist who can claim to have 'invented' character studies but the work of Kevin Lynch (Image of the City 1960) and Gordon Cullen (The Concise Townscape 1961) are perhaps best known for looking at classifying and understanding places as a whole from the human perspective.

Character assessments can be taken at a variety of levels ranging from understanding the wider landscape, to to the city and the neighbourhood level. Typically, as an urban designer you will undertake character analysis at the neighbourhood level, but you can adapt the process by changing the variables that you study and the detail that you go into. The character analysis process results in a diagram which splits down the study area (or neighbourhood) into a series of smaller areas, each with a collective, but distinctive character. Each character area will have a separate character or identity to its neighbours. Typically these are between 1 and 3 hectares in size when working at the neighbourhood level.

A places character can be made up of a wide range of variables, and as such is one of the most complex analysis techniques that we undertake as urban designers. Character is a mix of a study of the physical attributes of land use and urban grain, but the more variables considered the better your understanding of the place. You should therefore approach this process only after undertaking a great deal of wider single variable analysis.

## B   Why is understanding character so important?

It is important to acknowledge that every place has character, and that not all characters are positive. It is very easy when studying character to simply focus on the 'good' places, that function well and appear attractive and whilst that is an important role it is not the only use for the technique. Given that so much of the urban design process is focused on improving places, the role of character analysis is an important tool in helping to target areas for improvement or to safeguard characteristics that are important to the areas history or identity. In simple terms, it can be a useful tool in understanding exactly what does, or does not, make a good place.

Traditionally character assessment has it roots in the analysis and protection of historic environment, such as the study of conservation areas in England, where the focus has been on preserving and enhancing the unique qualities of these places. Historic England (the body in England tasked with preserving and enhancing the historic environment) developed a useful guide to historical character assessments in 2017. A link to that document can be found here:

https://historicengland.org.uk/images-books/publications/understanding-place-historic-area-assessments/heag146-understanding-place-haa/

C	What are the steps to production a character area analysis?

Please note that this process has been prepared for undertaking character analysis at the 'neighbourhood' scale. The diagram below illustrates the four steps visally.
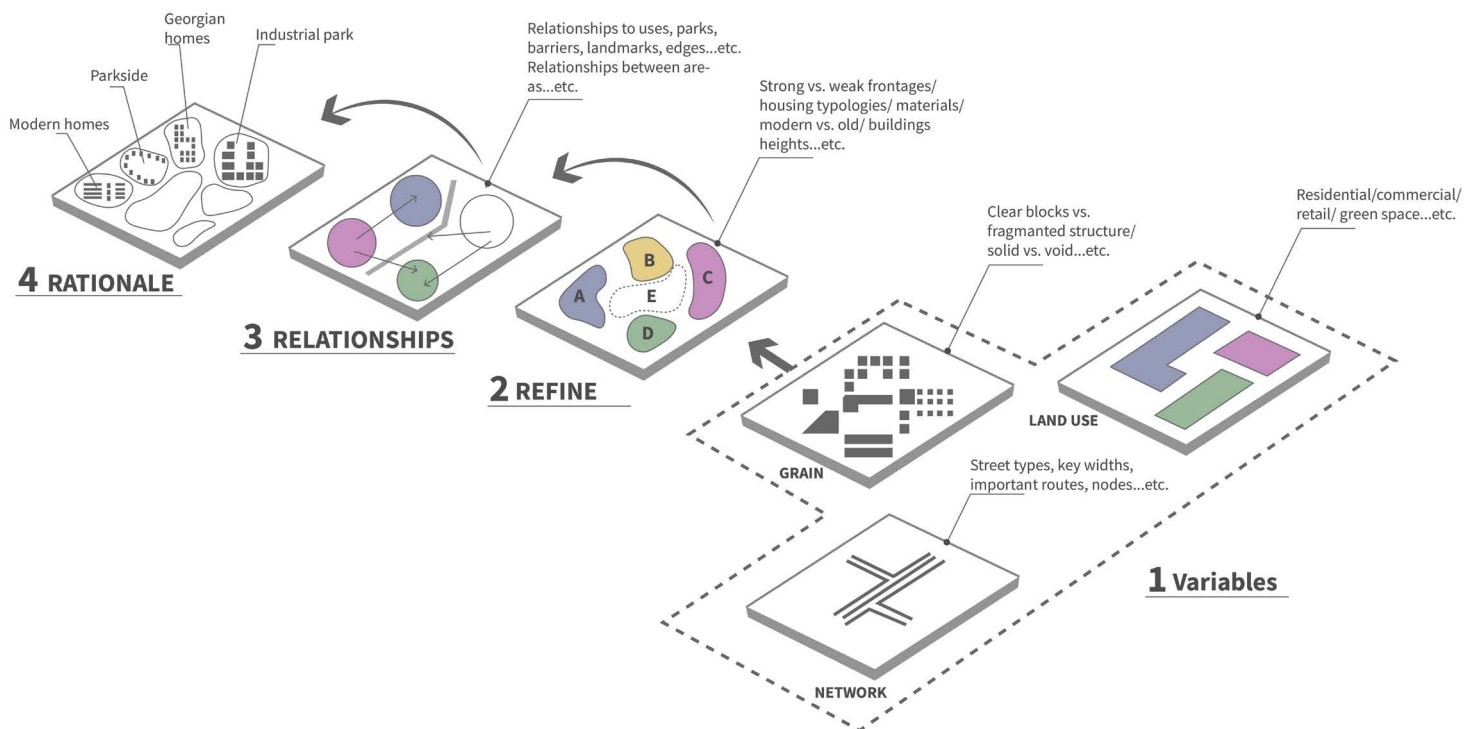
BEFORE YOU START – Organising and choosing your variables
It is really important to think carefully about the variables that you are going to use to undertake a character analysis. The variables that you choose will need to focus on what you want to use it for, or if you wish to use it as a general piece of analysis you should ensure that you focus on a range of variables. It is important that you have gathered all of the different techniques together and can reference them easily. Do not use the character analysis technique to introduce or work through variables that you have not yet studied – this is a technique based on synergy.

Do not focus on too many different variables as it will make you study unwieldy and may result in encouraging you to create too many character areas undermining the overall usefulness of the technique. Make sure that you also choose variables that have enough diversity across the neighbourhood as to be useful thinking about those that are based around networks, features and arrangements – the components of all good urban design. For example do not choose land use if your areas is predominantly a single use, but do choose the historical progression so that you can see when each residential area was built.

Stage 1 *Variables*

This is a brainstorimg stage that aims to identify the main variables which define character areas. To make the process easier it has been divided into two steps:

A Identifying broad character areas

Begin by choosing two or three key variables to identify the first broad character areas. A good place to start is using the three variables - **land use analysis** (feature), **route hierarchy** (network) and the **figure ground** (arrangement). We will use these to illustrate this step. The land use variable has already divided the area into different land use zones but you should take care not to simply replicate this as the character areas – as we have already discussed land use is only one small part of character.

The figure ground analysis showcases a series of townscape variables that can help determine the character areas. The grain of development is clearly evident – look for areas of fine or course grain and see how these relate to the land uses. It will also show clearly areas that have a poor townscape, with few buildings. The route hierarchy which is a network based variable is a little more difficult to encompass into a character area, but it important to look how this relates to the other variables. A high capacity route, in an area of degraded or poor townscape indicates a very clear character, albeit a poor one.

B Initial draft character areas

This process is very simple. Take a base map at a neighbourhood scale (say 1:2500 or 1:5000) and lay a sheet of tracing paper over the top. Onto that trace possible different characters using the three variables process outlined above. Try to break the character areas down into initial sizes of 3 - 5 hectares (no less than 10 streets in a normal residential neighbourhood). Remember you are not looking to identify every minute difference in character, just the prevailing or typical character of an area. For example do not worry if a residential area has a few corner shops in it as this is part of its character.

You will be unlikely to get it correct first time (no urban designer does), but make sure that you cover all of the neighbourhood with one character area or another. Some people like to begin with copying the land use plan first and then begin to adapt this using the other two variables, however, this often leads to simply reflecting the land use plan – take care if you use this approach. At this point you should look to try and arrive at around 10 - 12 different character areas (using the scales identified above). Remember to include your site in the character areas – it might be wholly part of one character or could straddle two or more.

This sketch is the the first step in trying to bring the three basic variables together. The exact boundaries of the character areas are still quite loose, but some of the basic variables have been noted in each area. Features such as the road / rail corridor and commercial void are clearly shown.

Stage 2   *Refine and detail your character areas further*

Once you have the basic pattern of characters on your tracing paper, you can introduce other variables to further refine or enhance your character analysis. Introduce these one at a time and either use them to further divide the larger character areas, or amend their boundaries. For example, using a legibility analysis **(see toolkit on legibility analysis)** might allow you to think about gateways or key public transport or cycle and pedestrian routes **(see toolkit on transportation and connection analysis)** that would impact on the character of a particular area. You can either add these on another layer of trace or simple change the boundaries you have already drawn at step one.

STEP 2 - REFINED (Inc. Legibility + others)

This sketch includes elements from the legibility analysis. The location of the two main spaces is marked on and these potentially give some identity to two separate character areas. It still relies predominantly on land use as a dominant variable, so additional variables should be added.

Think about the human experience when you are doing this stage of the process. Urban design is all about the creating places for people and as such it is important that the character study does not forget this component. Think about how you (or others) feel when in that particular area – do you feel safe? Do you enjoy being in that area? Is their lots of activity and vibrancy? Does the area feel empty or neglected? All of these (and more) are good questions to ask at this stage and may help you to further refine the character areas.

Stage 3   *Relationships and features*

Once you have determined the various character areas, you can study the local vernacular to add both more detail, and help to ensure that your areas make sense. Local vernacular refers to the architectural style or language of the buildings in a local area, with each area having a slightly separate language based on local materials and details **(see toolkit on creating a vernacular study)**. Remember that even two areas that have broadly similar vernacular might be different characters as a result of the size of plots, the network of streets and spaces, or even the era that they were built. Building age, taken from an historical analysis **(see toolkit on historical analysis)** is a really good way of helping to 'break up' larger character areas – especially two storey residential neighbourhoods in the UK which at first consideration are very similar.
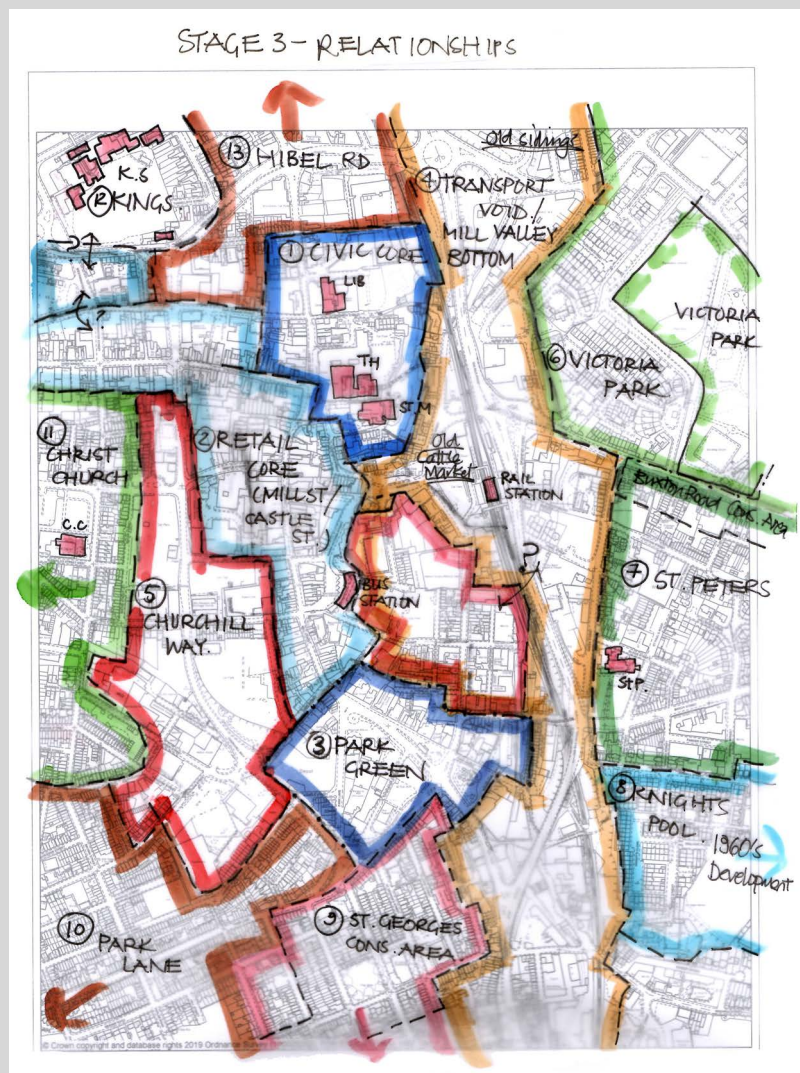
At this point, adding elements from the local built vernacular and looking again at some of the key spaces has really helped to provide some definition to the character areas, especially the residential areas to the edge of the town centre. However, now we have far too many characters and the graphic needs to be simplified.

As part of this process, existing designations such as conservation areas, listed buildings or even parks and open spaces can help to define character areas. A character areas relationship with a park is often results in a different character as residential and commercial properties will often front onto, or maximise key views to the park. This results in a unique townscape. The same can be said of key buildings or landmarks, such as key civic buildings or transportation hubs, where the townscape is designed to focus views and vistas towards these key buildings. It is really important that these features are part of a wider character area – they do not stand alone.

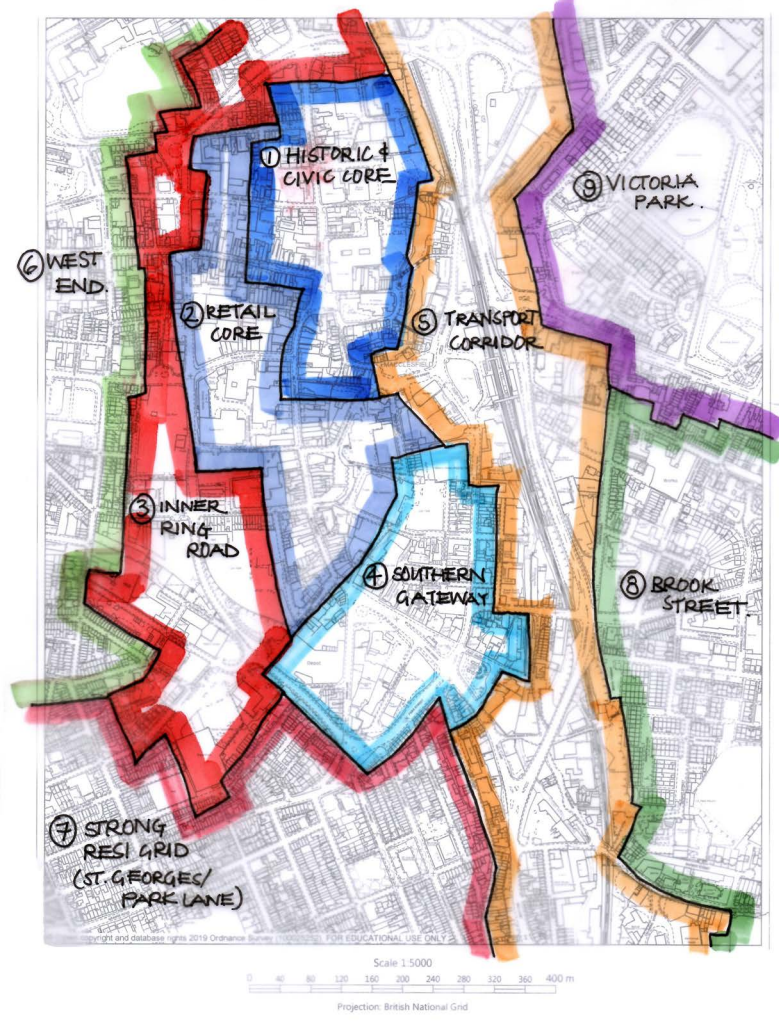**Stage 4**   *Rationalise your study*

Often having gone through stages 1 – 4 above, you find that you have many different areas some of which are quite small. Unless there is a particularly important a single street or block is unlikely to be a character area in its own right. Remember, sometimes a character is set by a single land use, which as a range of styles or ages of buildings (such as a historical core of an old village), or a range of different community and retail uses might become a neighbourhood centre as opposed to four or five different elements. It's important that you don't forget 'functionality' – how people use a neighbourhood. As part of this process see if you can name your character areas to reflect their attributes; this makes it easier to reference and use them in the future.

One of the best techniques for helping to rationalise your character study is to develop a matrix. List your character areas down the side, and then the features or characteristics across the top.

The table below shows how we did it for five charachter areas. We will show you how to present this graphically in section D.

Character Area	Land Use	Urban Grain / Form	Relationship to topography	Key routes / spaces	Built form	Age / Period	Landmarks / key features
1 Historic & civic core	Civic and commercial buildings, retail	Small grain, historical pattern, strong building lines	Sits at the top of the hill – prominent location	Main market square and church gardens	3+ storey, stone and brick, construction	Various, most building from 19th century	Town hall, St Michaels Church
2 Retail core	High street retail	Strong building lines, medium grain	Runs north south along hilltop	Key high street route north-south	Main two storey – mixed materials	Mixed	None
3 Inner ring Road	Vacant sites, car parks, warehousing	Lots of void space, lack of structure	Made land and embankment		Large floorplate warehousing	N/A	None
4. Southern gateway	Food, drink, leisure, some residential	Strong, historical building lines	Flat area to bottom of hill	Park Green, Cenotaph	Mix of grand buildings and 2 and 3 storey commercial uses	Mix age, predominance of Victorian	Listed building at Park Green
5 transport corridor	Warehousing, car parks and transport infrastructure	Lack of structure, large grained townscape	Along the flat valley bottom	Old cattle market to station front	Mainly older warehouses and mills built to red brick	Mixed	Railway station

STAGE 4 - RATIONALISATION

① HISTORIC & CIVIC CORE
⑨ VICTORIA PARK
⑥ WEST END
② RETAIL CORE
⑤ TRANSPORT CORRIDOR
③ INNER RING ROAD
④ SOUTHERN GATEWAY
⑧ BROOK STREET
⑦ STRONG RESI GRID (ST. GEORGES/ PARK LANE)

Scale 1:5000

0 40 80 120 160 200 240 280 320 360 400 m

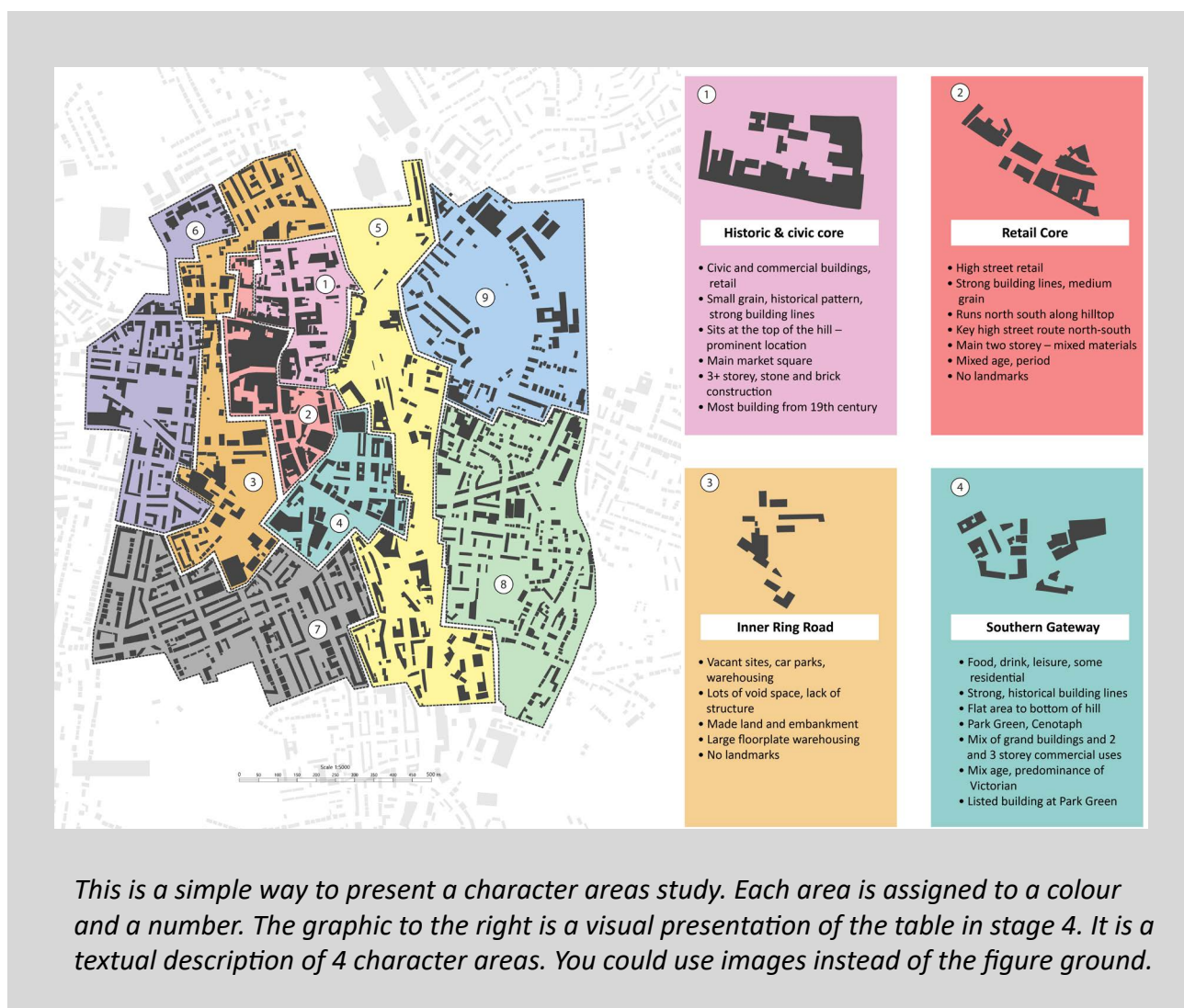Projection: British National Grid

This final stage seeks to rationalise the overall number of character areas (about a 30% reduction). The matrix was used to identify how similar areas could be combined. For example the character area to the south-west was created because of a greater number of similarities, despite localised variations.

D | **How should I present my character analysis?**

Before you finally present your character area it is worth subjecting the study to a 'ground proofing' or test in the field. All of the work that you have done on your character study has been desk based, using material from other sources (much of which you have collected yourself) so it's important to return to your site or neighbourhood and check that you have been correct in setting the boundaries of your character areas. This is not so important when presenting as part of an analysis technique but is really important when it comes to how it might influence a design or development brief later in the design process.

When it comes to presenting a character study there are two parts, both of which are equally important. The first is the character plan itself and should clearly indicate each of the established character area. The second part is a textual explanation of each character. The second part, is the associated information. This would normally comprise of a summary of the key findings from the table (see stage 4) as a series of 5 – 6 bullets points, and one or two small images or graphics which will help to showcase the difference in character. Remember to showcase the 'typical' features, not the extraordinary – save unique features for your landmarks or listed buildings assessment.

① Historic & civic core

- Civic and commercial buildings, retail
- Small grain, historical pattern, strong building lines
- Sits at the top of the hill – prominent location
- Main market square
- 3+ storey, stone and brick construction
- Most building from 19th century

② Retail Core

- High street retail
- Strong building lines, medium grain
- Runs north south along hilltop
- Key high street route north-south
- Main two storey – mixed materials
- Mixed age, period
- No landmarks

③ Inner Ring Road

- Vacant sites, car parks, warehousing
- Lots of void space, lack of structure
- Made land and embankment
- Large floorplate warehousing
- No landmarks

④ Southern Gateway

- Food, drink, leisure, some residential
- Strong, historical building lines
- Flat area to bottom of hill
- Park Green, Cenotaph
- Mix of grand buildings and 2 and 3 storey commercial uses
- Mix age, predominance of Victorian
- Listed building at Park Green

This is a simple way to present a character areas study. Each area is assigned to a colour and a number. The graphic to the right is a visual presentation of the table in stage 4. It is a textual description of 4 character areas. You could use images instead of the figure ground.

Each character area study will be different but it is typical to illustrate your study with some of the following:
•   Small extracts from the figure ground showing the typical grain of the area
•   Sketches or photographs of a typical street within the character area
•   Sketch or photographs of typical house types/ buildings within the character area

When thinking about presenting your character study as part of your overall project or study, it is important that it is presented alongside other techniques that collectively will allow you to showcase the most appropriate material. Do not simply present the work that led to the character study. Always include a series of bullet points or a short paragraph of text summarising the key findings.

Remember, it can be used in place of a number of single variables so do not keep repeating the same information in just a series of different forms.

The section below shows you how to present this technically in Adobe Ai.

Creating the graphic with Adobe Illustrator

*Adobe Illustrator is a vector based software designed to draw or edit vector graphics. As our basemap is a vector graphic downloaded from Digimap, Ai is the most appropriate software to create the Character Study analysis. Refer to the **Adobe Illustrator** Toolkit handout for more information.*

This is a general guide on how to create this graphic in Ai. For a detailed step by step guide on how to use Adobe Ai, please refer to the Ai toolkit.

Creating a character study map in Ai is very simple. You need the vector map downloaded from Digimap for your area (refer to **Digimap** toolkit), the rest is done simply in Ai. The map should be at neighbourhood scale (approx. 1:5000). You need the figure ground only as your basemap for this graphic. Refer to the **Figure Ground** toolkit handout and **Adobe Illustrator** toolkit handout to learn how to separate layers in Ai.

- This is how your basemap should look - simple and clear showing a slightly larger context than the study area.

- We gave the buildings a dark grey colour instead of black to go with our graphical style.

- Put all buildings on a seperate layer and call this layer "Buildings". Delete all other layers.

*- Create a **new layer** and call it "Character Areas"*

*- Place this layer **below** the "Buildings" layer*

*- Use the **Pen Tool** to create a well defined polygon for each character area*

*- Give the **Fill** of each area a distinct colour. One useful tip is to give areas solid colours and then reducing the **opacity** to 30%. As the map has many colours this technique will make the final graphic looks less complicated.*


*- Select all character areas and give them a **Stroke**.*

*- From the **Stroke** options make strokes **dashed**.*

- As the shapes are faded in the stage above, the strokes will also look faded. However we want them strong as they define the character area boundaries.

*-To make them bold we need to **copy** all character areas to a new layer. Call it "Strokes"*

*-Select all elements in the "Strokes" layer and give them **no-Fill**. Raise the **opacity** to 100%.*

- Create a **new layer** and call it "Annotations".

- Number the areas using the **Type Tool.**

- Give each number a white background to make it stand out. The background could be a shape with a white Fill and a black Stroke as in our example.

- The numbers must correspond to the numbers in the textual description.

- Finally, select all buildings outside your character areas with the **Lasso Tool** and move them to a separate layer. Sellect them all and reduce their opacity to 30%.

Character studies could be a part of general urban study around an area, or they could be a part of the analysis section of an urban design proposal of a specific site. In this case your site should be clearly highlighted on your map, sitting approximately at the middle of the graphic.
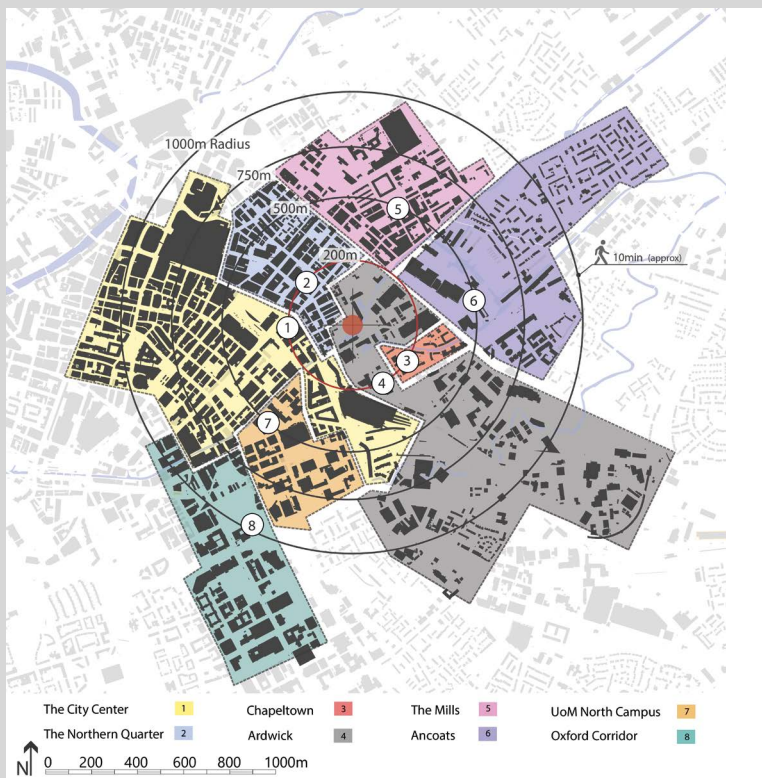
This character study graphic is an example from the book *"The Urban Design Process"* (Black & Sonbli, 2019).

The site is highlighted in red at the middle of the graphic.

Walking distance circles from the site are created to give an idea of scale

The legend, scale bar and north arrow are presented at the bottom of the graphic.

E   What can we learn from a character analysis?

In simple terms, the character study allows the urban designer the ability to understand and record the myriad of variables that make up local character, an vitally important component of contextually responsive urban design. Character is really important when it comes to designing for any site and responding to context. A good study will bring together a number of variables so that the relationship between features, networks and arrangements are considered in a holistic manner.

A good character study will be able to tell us of the character areas that boarder our site, the character of the site itself (which could be one or more) and therefore allow the urban designer to contribute and safeguard the character, or in areas where the character is poor, create and significantly improve that character drawing on the nearby characteristics. The fact that a character study can tell us about scale, mass, materials, land use, connectivity, key routes and destinations, important townscape features and local design details just to name a few, allows it to be a 'go to' technique to help draw these ideas together and make design decisions.

Understanding local character, through undertaking a character analysis, allows the urban designer to make sensible and evidenced value judgements about the way that they should progress with a site in a comprehensive and cohesive manner. If we tied to focus on each and every variable that we study, it becomes so overwhelming that even progressing to suggesting the broad objectives for a design solution becomes impossible. The character assessment, when mastered, is a great way of simplifying a great deal of information, and begin to package it into a format that we can use to suggest inventions.