User insights

"I have had some cursory discussions with Amazon about disrupting this particular area of the software market as I'm fed up with paying a fortune for what is essentially a load of out-of-date complicated rubbish. I'm sure that given the right energy and contacts that there is something that can be done about it."

— A county council

Our approach to gathering user insights

Identifying and recruiting users for testing

The team identified users for testing based on their roles within local authority planning teams, responsible for the processing of householder planning applications. To ensure a wide demographic of users, the team recruited across local authorities of varying sizes and locations (e.g. a blend of small and large, rural and inner-city, outer-London and London), digital confidence (low, high) and role experience (graduate planners, experienced planners).

Facilitating contextual user testing

To facilitate user testing sessions, the team arranged user interviews (face-to-face, video conferencing) to test prototypes through setting up testing environments, following a discussion guide, recording usability testing, gathering feedback, then analysing testing feedback into tangible recommended changes for iteration. This process ran across four two-week testing and iteration cycles through the alpha phase.

As part of user testing, the team has carried out:

- **30** x back-office prototype testing sessions with planning team staff

- **2** x reviews of as-is process maps developed by partner councils

- **3** x planning application process shadowing sessions

Engaging with 14 councils:

- **7** x London borough councils: Croydon, Greenwich, Islington, Lambeth, Redbridge, Southwark, Waltham Forest

- **4** x city councils: Coventry, Edinburgh, Leeds, Sheffield

- **3** x district councils in rural areas: Braintree, North West Leicestershire, Wycombe
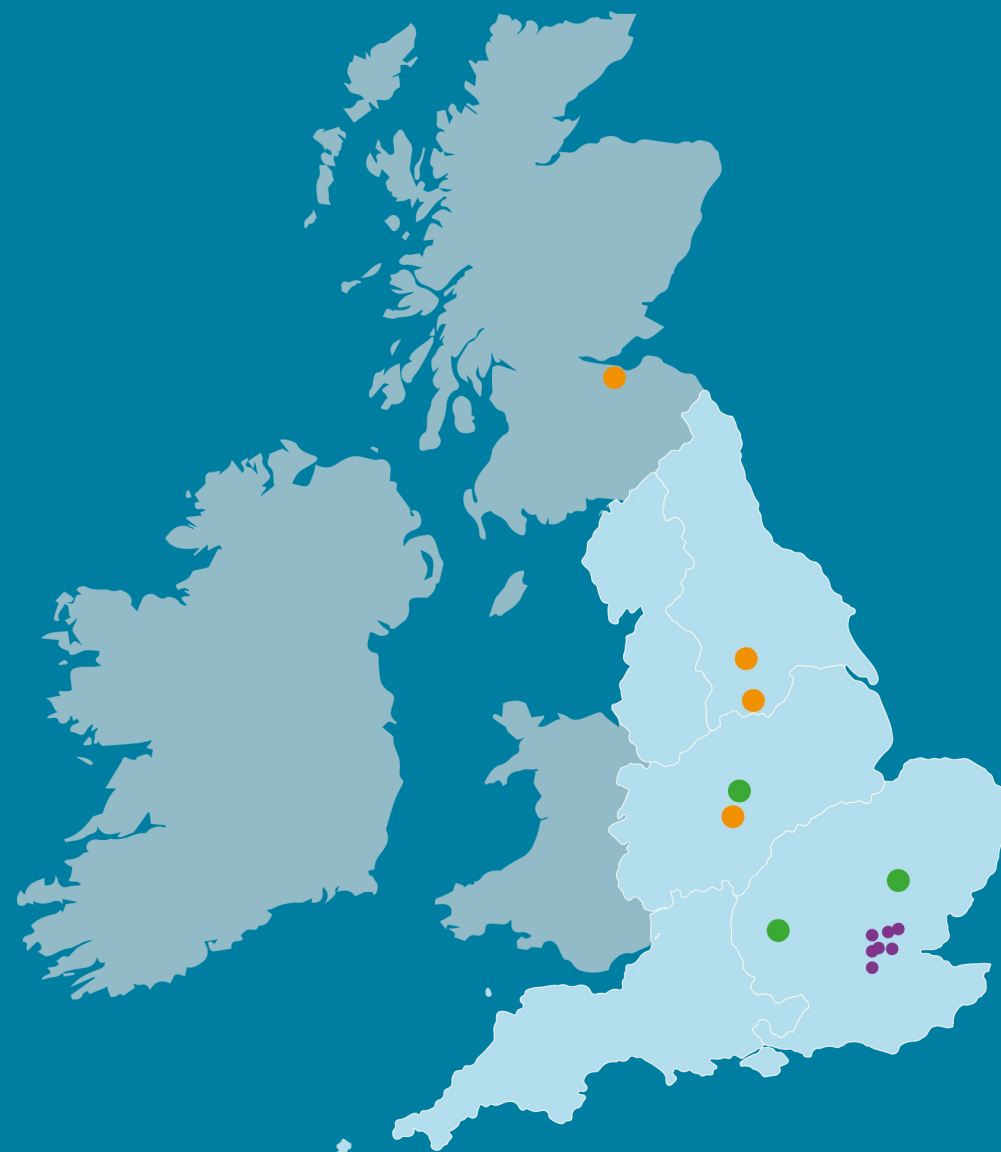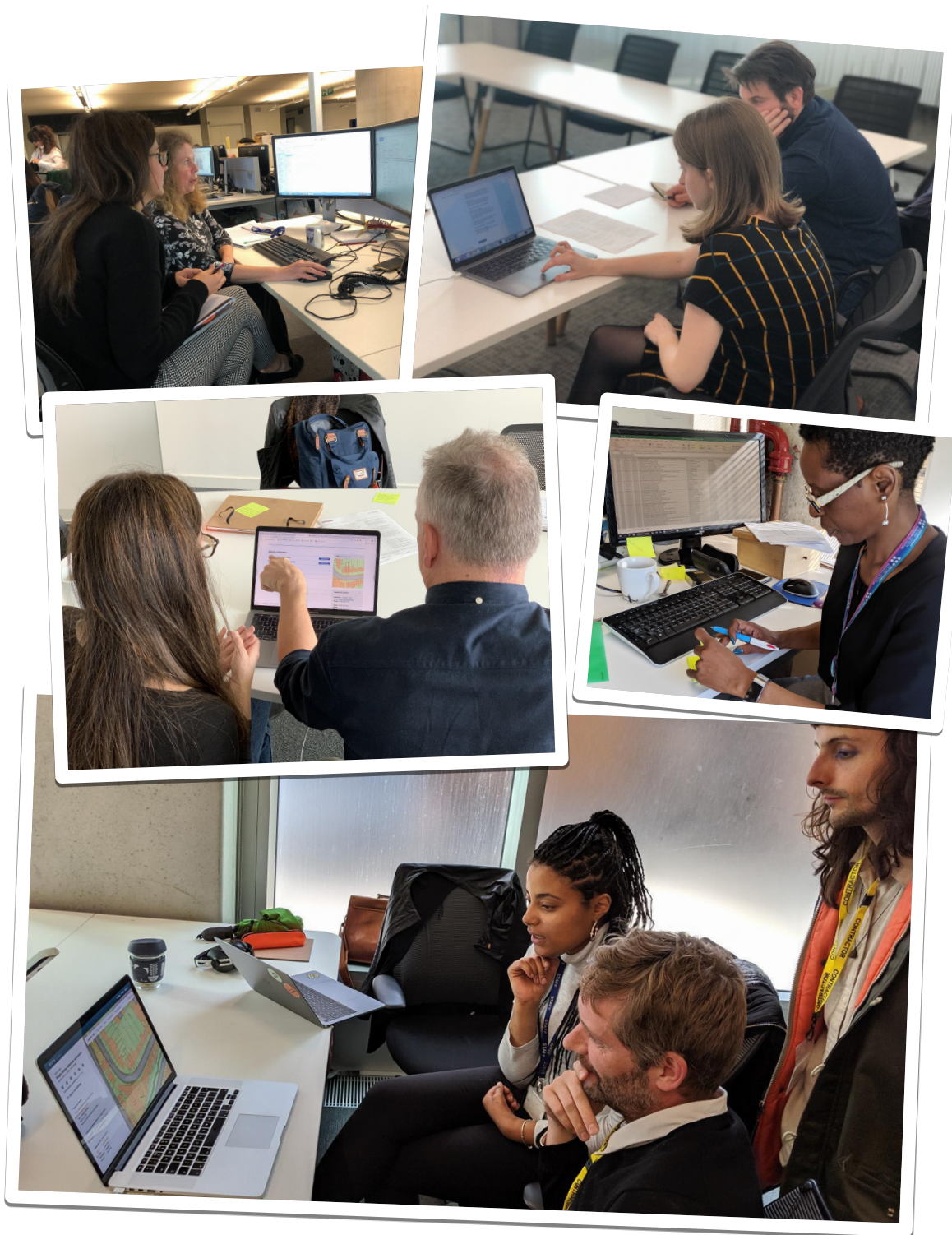
The team tested with 30 users:

- **14** x planning officers, including graduate planners

- **8** x planning managers within partner councils

- **8** x technical support staff

Our team engaged with people aged between 23 and 55 years old, with between four months and 30+ years of planning experience.

Some of the people engaged had only worked in one council, whereas others had experience across multiple councils, providing a range of low planning experience to higher expertise.

User group characteristics

Alpha focus

The primary focus of the alpha was to prototype the assessment part of the planning process so our main users were **planning officers** and **planning managers**. However, we also drew on the [research and insights gained during discovery](#) to guide the design process.

	Discovery			Alpha	
User group	**Size**	**Avg. age**		**Size**	**Avg. age**
Technical support officers	10	48		8	44
Graduate planning officers	15	25		5	24
Senior & principal planners	23	36		9	39
Planning managers	7	46		8	42
Strategic planners	5	41		-	-
TOTAL	**60**	**37**		**30**	**37**

Digital literacy

On average, we found digital literacy to be high across all key user groups. It is common for officers to find workarounds for elements of their work that are not well supported by planning software.
Graduate planning officers were particularly well versed in supporting their workflow with non-legacy software, such as **Google Maps**, **3D apps**, etc. They were also the group that reported more frustration towards unintuitive interfaces and lack of support on mobile devices.

Key insights and opportunities

Planning is not a linear process

Planners might begin assessing a plan one way but need to consider additional criteria when new information comes to light. For example, after receiving feedback from a consultation.

Different team members may also be involved at different times. Technical support staff and planners may ask applicants for amendments which may not be provided until several months later. Likewise, planning permission may be granted on the condition that applicants provide further details before starting any work (such as finalised building materials) but this may not happen for several months or even years later.

This means staff sometimes need to pick up and work on assessments that have already been partly assessed by somebody else.

"It's useful to see where an application has got to because we sometimes have to work on applications that somebody else has started, if they go off sick for example"

"It might be a year down the line.. They send in the materials but the planner who originally worked on it has since left"

Opportunity for... a flexible system that enables planners to easily dip in and dip out of different parts of the assessment.

Key insights and opportunities

Constraints affect the way planning applications are assessed

Planners need to know what constraints apply to an application so they can identify what needs to be considered as part of their assessment.

Constraints can be based on:
- location data e.g the property is in a conservation area
- property data e.g the property is a terraced house
- application data i.e what the applicant is proposing to do to the property

Planners identify constraints by referring to the council's GIS system, policy documents, government websites, consultation feedback, site visits and even Google Street View (to see the property type).

> *"Depending on what constraints you've got you might look at different policies and that will impact what sort of assessment you make"*

Opportunity to... automatically flag up known constraints based on the property address and application information.

Key insights and opportunities

Officers have to hunt for the information they need

Planning officers spend a lot of time navigating between screens, systems and documents to find the information they need to assess applications. They search government websites and the council's GIS system to identify constraints. Amendments that are sent through Planning Portal arrive with all of the original documents again so officers have to sift through it. All of this slows officers down and results in a frustrating user experience.

"Everything's in a separate system"

"I spend most of my time going from screen to screen"

Opportunity to... provide the information that planners need when and where they need it.

Finding and referring to relevant planning policy slows officers down

Policy helps planning officers to understand the constraints of a particular proposal, who needs to be consulted and if any conditions need to be applied to their recommendation. However, it is often buried in lengthy policy documents which can be time-consuming to sift through and requires officers to manually type in or copy and paste the policy lines they want to include in their assessments.

"A neighbour might object but if it meets the policy requirements we can justify why we've granted it"

"I want to see that they [planners] have looked at the right policies, to back up their decision"

Opportunity to... reduce the learning curve for graduates, by flagging up relevant policy guidance in the assessment.

Key insights and opportunities

Mistrust of applicants and systems results in more double checking

There is a level of mistrust between planning teams and applicants and their agents. Poor quality submissions from existing applicant facing services - that don't validate data before it is submitted - and negative experiences with some agents, results in officers spending more time double checking information.

"Does the applicant enter the property type or does the system? How reliable is it?"

"I'd want to check the agent.. There's one that's a red flag - they always send in the same plan, regardless of the property"

Opportunity to... be clear and transparent about where data has come from

Standardising parts of the process will allow officers to focus on applying their skills where they are most needed

Planning officers spend a lot of time copying and pasting information and formatting planning reports, which can be time-consuming and laborious. Officers and managers agree that some parts of the process could be automated and standardised, providing there is an opportunity for them to still apply their own skills and judgement to assessments.

"I want to be able to explain my reasons - why I've made a particular decision"

"There needs to be a balance between standardisation & allowing some flexibility"

Opportunity to... standardise repetitive elements so officers can apply their skills where needed

User stories

Planning is not a linear process

1. When I open an application, I need to identify which parts of the assessment have already been completed by me / someone else, so I know what to start working on next.

2. When I am assessing an application, I need to be able to switch between different parts of it, so I can still make progress while I'm waiting for something else to happen (e.g an applicant to confirm a site visit).

3. When I find out new information about an application, I need to be able to add this into my assessment, so I can factor it in to my recommendation.

BoPS *Southwark*

Home > 19/AP/1852

19/AP/1852
74 Elmer Avenue, London, SE15 5DE
Application for full planning permission (householder)

Application status

● **6 days remaining**
○ consultation ended on 28 October 2019
○ validated on 1 October 2019

Summary of proposal
- roof extension (rear)
- single storey extension (rear)

Property details
- **property type:** Residential, dwellings, terraced house
- **listed building:** No
- **conservation area:** Holly Road

Fast-track application: 19/AP/1852

Review the proposal

Write a summary of the proposal — COMPLETED

Choose assessment criteria — COMPLETED

Assess the proposal

Assess the impact on the neighbouring amenity — COMPLETED

Assess the impact of the design

Add further assessment criteria

Make recommendation

Review assessment

Make recommendation and select conditions — CAN'T START YET

☐ Conservation areas
☐ Listed buildings

User stories

Constraints affect the way planning applications are assessed

1. When I open an application I need to be able see all of the constraints associated with the property so I know what I need to consider as part of my assessment.

2. When I open an application I need to see if there are any local constraints that might affect what the applicant can do, such as nearby listed buildings or tree protection orders, so I can factor this into my assessment.

3. When I assess an application I need to see the property's planning history so I can check whether any previous alterations to the property will constrain what the applicant is proposing to do now.
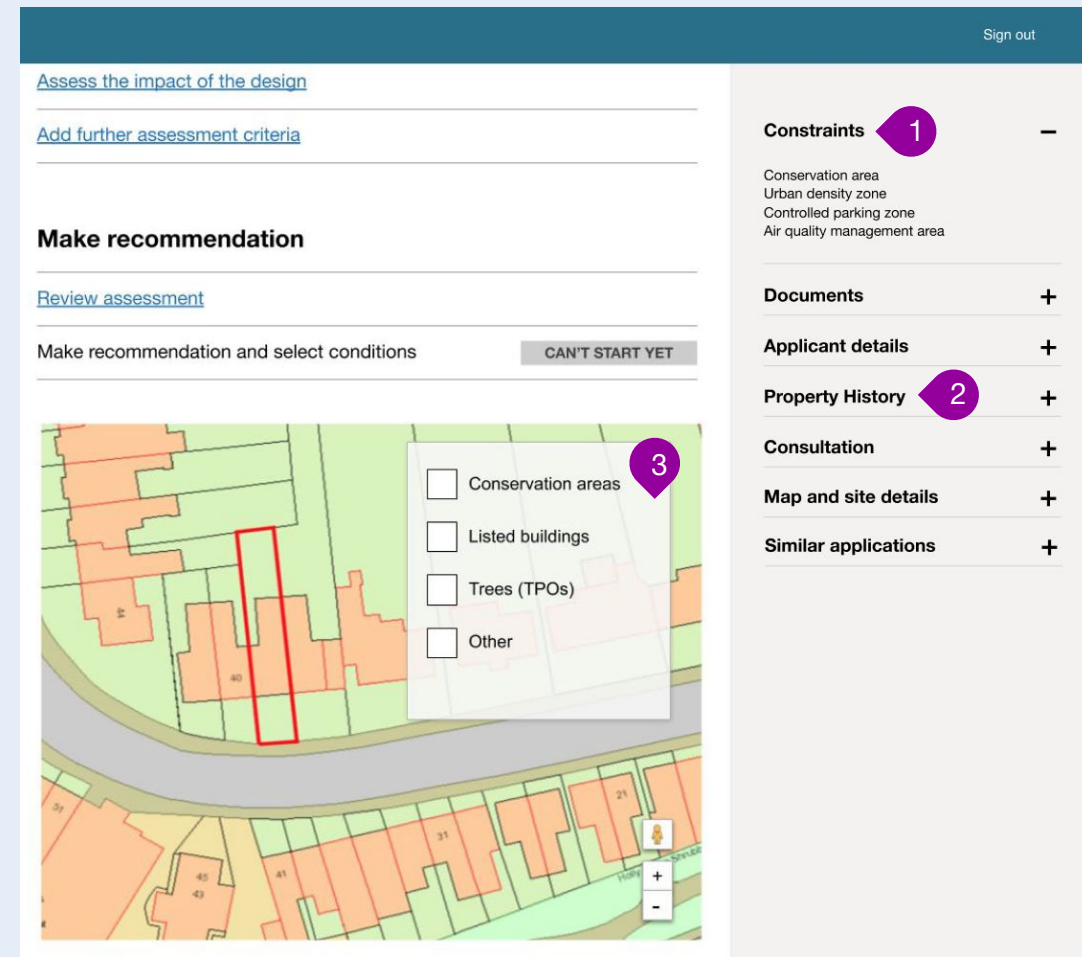
User stories

Officers have to hunt for information

1. When I assess an application I need to be able to quickly access all of the submitted documents and information related to that application, at any point, so I can easily refer back to it when I need to.

Finding and referring to relevant planning policy slows officers down

1. When I assess an application I need to be able to quickly check what the relevant policy requirements are so I can factor these into my recommendation.

2. When I assess an application I need an easy way to include relevant standard policy lines in my report so I don't have to manually type them in each time.

BoPS Southwark   Sign out

19/AP/1874
43 Busbey Lane, London, SE16 5GG
Application for a Certificate of Lawfulness

Home > 19/AP/1874 > Assess PD requirements

Assess permitted development requirements

Application status

🟢 17 days remaining
⚪ validated on 1 October 2019

| Certificate recommended |
| Based on the information provided by the applicant the proposal meets the requirements for permitted development. |

Summary of proposal

- roof extension (rear)
- dormer

Are the following statements true?

The project will not include the alteration or addition of a chimney, flue or vent pipe

⚪ Yes   ⚫ No   ☑ Request an amendment?

Property details

- **property type:** Residential, dwellings, terraced house
- **listed building:** No
- **conservation area:** No

▼ Policy and guidance
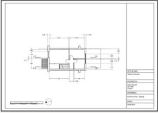
A roof extension that involves the removal, alteration or addition of a chimney, flue or vent pipe will require planning permission.
GPDO 2015 S.2 P.1 B.1 (e)(ii)
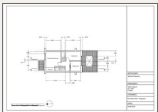
The extension will not include an outdoor verandah or balcony
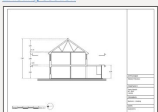
⚫ Yes   ⚪ No

▼ Policy and guidance

Constraints   +

Documents   (1)

Existing floor plan

Proposed floor plan

Existing section

Proposed section

Existing roof plan

BoPS Southwark   Sign out

19/AP/1852
74 Elmer Avenue, London, SE15 5DE
Application for full planning permission (householder)

Do you want to attach any conditions to your recommendation?

⚫ Yes

☐ This permission, unless otherwise stated, is subject to Section 91 of the Town and Country Planning Act, which requires that the development hereby permitted shall commence within three years of the date of this permission.

Application status

🔴 6 days remaining
⚪ consultation ended on 28 October 2019
⚪ validated on 1 October 2019

☐ The materials to be used in the implementation of this permission shall not be otherwise than as described and specified in the application and on the drawings.

☐ Condition 3

☐ Condition 4

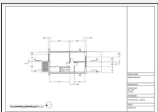**Summary of proposal**

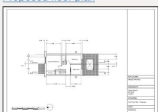- roof extension (rear)
- single storey extension (rear)

⚪ No

Property details

- **property type:** Residential, dwellings, terraced house
- **listed building:** No
- **conservation area:** Holly Road

Provide any further comments

📷 📎

Constraints   +

Documents   − (3)

Existing floor plan

Proposed floor plan

Existing section

Proposed section

User stories

Mistrust of applicants and systems results in more double checking

1. When I assess an application I need to be able to easily find the contact details of the agent and/or applicant so I can get in touch with them if I need more information.

2. When I assess an application I need to know which information has been submitted by the applicant so I know what I am basing my assessment on.

Standardising parts of the process will allow officers to focus on applying their skills where they are most needed

1. When I work on an application I need the information that we already have to appear in the assessment, with the ability to edit and/or add to it, so I don't have to copy and paste it all from the original application form.

Personas and user groups

We identified four main types of users that could directly benefit from an improved back-office planning system.

We created personas to represent each group and help us clearly communicate user needs.

Technical Support Officer

Graduate Planning Officer

Planner / Senior Planner

Planning Manager

Technical Support Officer

Roger is a planning technical support officer with 3 years experience. He processes planning applications coming through the Planning Portal and makes sure they are stored correctly on the system.

Roger's key responsibilities are:

- Validation – checking that applications comply with requirements
- Corresponding with applicants - for example, if a fee hasn't been paid or a supporting document or plan is missing
- Indexing – naming and classifying submitted documents
- Reviewing consultation responses

"We shouldn't be doing all this data entry. It's the same information that applicants have already loaded into the Planning Portal."

"I want to be notified when the applicant sends an amendment."

Roger's user need: Manual processing involved in every application could be simplified, as it's repetitive and labour heavy. An easier way to correspond with applicants and agents.

Graduate Planning Officer

Ciara is a recently graduated planning officer. She has been in post for 6 weeks and is slowly finding her feet, but her development is hampered by working with a back office system that's not very intuitive.

Ciara's key responsibilities include:

- Consultation - identifying and contacting the relevant consultees
- Assessing the application - make site visits, reviewing relevant policies and requesting alterations when needed
- Making a recommendation and sharing the report for review

Ciara's user needs: Guidance related to the type of applications she is working on so she knows which factors to consider. An easier way to find the information she needs to complete her assessment including the ability to see similar applications.

*"The navigation is poor.
I spend most of my time flitting between screens, searching for stuff"*

"If I'm unsure [about how to assess something] I'll look it up in the planning policy PDF"

Senior Planning Officer

James is a senior planning officer and a team lead for the fast-track team. He has been in post for 4 years and knows exactly what to look for when he starts assessing an application. He starts by checking whether the application has any enforcement actions or constraints attached to it. He also checks the site's planning history.

James' has the same responsibilities as a graduate planner but he tends to work on more complex proposals.

He is also responsible for:

- Allocating new applications to the rest of the planning team.
- Supporting graduate planning officers

James' user needs: Known constraints can be automatically flagged up on applications along with suggestions for relevant conditions so he doesn't need to type them in each time.

"When I first look at an application I check whether there's any enforcement action, what the constraints are, the history - have they already extended..."

Planning Manager

Laura oversees a team of six Planning Officers.

She regularly sits down with them to review the applications they have assessed. She's wants to know what they've considered and how they've made their recommendation as she is responsible for making the final decision on applications.

She is also responsible for ensuring graduate planners receive the right training and support.

Laura is aware of the lengths her officers go to, to make sure applications are in shape for review.

Laura's user needs: That her team can spend more time working creatively with applicants & agents on producing a satisfactory outcome and less on making sure the data within the application is correct. That graduate planners can spend more time learning the job and less time learning how to use the IT system.

"As a manager I want them [planners] to assess the application and I want to know the reason for their decision."

"If you can guarantee the accuracy of the data entry then this becomes a formality."