Diversity Impact Assessment (DIA)

Cambridge South Infrastructure Enhancements

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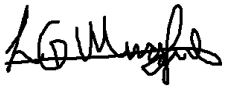
Document Approval and Sign-off

	Name and position	Signed	Date
DIA Owner	Lewis Wingfield Senior Development Manager		
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Senior Manager [Sign-off should be by someone who can approve policy, programme or budget changes.]			

Project-related Documents

Document No.	Document Title	Relevant Section(s)

Overview: what's in this document

Diversity Impact Assessment (DIA) Types

Select the type of DIA from the following list

☒ 1	**The Built Environment**, or the procurement of works e.g. crossings & bridges, including maintenance, stations, offices/depots and other staffed buildings
☒ 2	**Events**, including conferences, training courses and public consultations
☐ 3	**Policies & Standards**, development, revision and withdrawal of standards, policies and associated guidance including for design.
☐ 4	**Information Technology (IT)**, IT design, development and enhancement projects
☐ 5	**Change Programmes** – Better Everyday
☐ 6	**Procurement of goods and/or services**

Step 1: Clarifying Aims

Q1. What are the aims of this project/piece of work?

Please read the Q1 guidance in 'Guidance: how to complete the Network Rail DIA form'

The aim of the Cambridge South Infrastructure Enhancement Project (the Scheme) is to develop infrastructure options to improve connectivity in the Cambridgeshire region accommodating committed services and facilitating further long term needs.

This involves a new station in the vicinity of the Cambridge Biomedical Campus (CBC) and associated track, signalling, OLE and E&P works.

External drivers
The new station could support:

- expected passenger growth
- expected growth in employment in the science and technology sectors.
- significant residential development in the Cambridge Southern Fringe

The delivery of the new station will offer an inclusive and positive transport mode for those in South Cambridgeshire and beyond, providing greater access to a range of potential routes on the rail network and to the health, employment and study facilities on the CBC. The provision of the station will give people travelling to/from South Cambridgeshire greater choice of where to travel to/from and the choice of a public transport service that operates seven days a week from early morning to late evening.

Context and the surrounding area
Rail access to the CBC is currently limited: passengers must travel to Cambridge Station and switch to alternative modes for the final leg of their journey. This can take between 9 and 17 minutes by bus, around 30 minutes on foot, 15 minutes by cycle or 10 minutes by taxi. On Sundays, some bus services do not run and some services are less frequent outside of working hours.

The CBC combines world-class biomedical research, patient care and education on a single site: Addenbrooke's, Royal Papworth and Rosie (maternity) hospitals sit alongside global research and development centres. In addition, people travel to the CBC from locations across east and south-east England and beyond, particularly as Addenbrookes' Hospital is the East of England's Major Trauma Centre. North-west of the proposed station are the Long Road Sixth Form College, the Cambridge Academy for Science and Technology and the Bright Horizons Long Road Day Nursery.

To the west of the new station is the village of Trumpington, new housing estates made up of the Clay Farm, Glebe Farm and Trumpington Meadows developments and Hobson's Park, a 120-acre open space which contains woodland, four ponds, one of which is a 50,000m2 bird reserve, allotments, playing fields for a new secondary school, and a range of play areas north of the Guided Busway. Trumpington Park Primary School is located on the Clay Farm development and is the nearest primary school to the proposed station.

Q2. Could this work impact on people?

☐ **No (Please go to Q3)**
☒ Yes
If yes, briefly explain how this work could affect people (considering our duty to promote equality, tackle discrimination and foster good relations between groups)

General

The delivery of the new station will offer an inclusive and positive transport mode for those in South Cambridgeshire and beyond, providing greater access to the rail network and to the health, employment and study facilities on the Cambridge Biomedical Campus (CBC). Nevertheless, the construction works could impact negatively upon passengers and the local community as the construction period could last around two years.

The delivery of improved rail connectivity should help to achieve equal accessibility and opportunities for all; the new station will be designed with inclusivity for Everyone in mind, where equality is promoted, and users are not discriminated against on the grounds of their protected characteristics. The aim will be to create a station that provides equal opportunities for all to access the station, use the facilities, navigate around the station and board a train.

The new station will impact on different groups of people in different ways. Details of this will be discussed in further detail in Step 3.

Particular aspects

It is worth noting that the likelihood of a location being used for suicide may be increased if there are facilities used by vulnerable persons in close proximity. This

includes A&E departments, psychiatric in-patient units[1], a hostel or accommodation for people with mental health or substance misuse problems. Any schools or education facilities also need to be considered[2]. A new station on the West Anglia Mainline may provide an opportunity for vulnerable people to take their own lives.

During construction

Whilst works are ongoing, this will impact upon passengers during possessions, users of the CBC who will be moving around a live construction site and users of Hobson's Park. NCN Route 11 from the South will be temporarily diverted however key pedestrian and cycle linkages will remain open throughout.

The works will have associated noise and vibration, which could have a negative impact on nearby residential developments and users of the CBC. Construction materials brought in on lorries may also have temporary effects on the community.

During operation

The proposed scheme will have positive impacts on the availability and physical accessibility of transport for all users, especially for people with mobility impairments, the elderly, pregnant women etc.

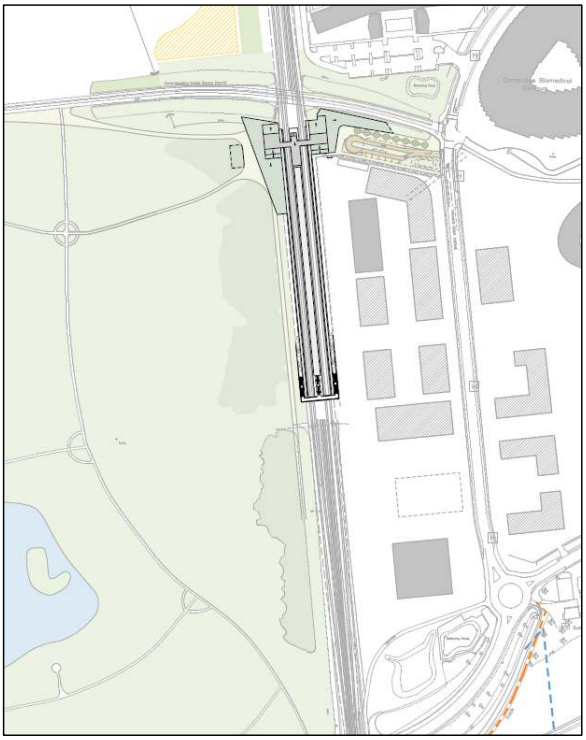
Crowding has greater consequences for passengers with disabilities who tend to have longer journeys and less flexibility to change them. The proposed scheme could help improve the travel experience of those with a disability as, depending on the desired destination, the new station could offer quicker and more reliable journey times. This may encourage more people in this protected characteristic group to take up rail travel.

The station itself will be designed in a way to support accessibility of disabled people. This will include the installation of a lift, information announcement systems (long line public address system) and station information/help points.

The station could help relieve congestion in the local area, reduce carbon dioxide emissions and support improved air quality by encouraging people to use more sustainable transport modes.

Details of the location and proposed design are shown below:

[1] Addenbrooke's Hospital has two psychiatric wards and a Liaison Psychiatry Service is provided on site. In 2017/2018 there were 117,074 A&E attendances. [Ref https://www.cuh.nhs.uk/about-us/our-profile/facts-and-figures]
[2] North-west of the proposed station are the Long Road Sixth Form College, the Cambridge Academy for Science and Technology and the Bright Horizons Long Road Day Nursery. Trumpington Park Primary School is located on the Clay Farm development and is the nearest primary school to the proposed station.



Q3. Decide if a DIA is required

After completing questions Q1 and Q2, decide if you need to complete the rest of this DIA.

If there are no impacts on people (employees, contractors, lineside neighbours or passengers) the remainder of the DIA is not required.

Decision	Author Name, position and signature e.g. James Smithson, project assistant	Superuser Name, position and signature e.g. Sally Richardson, Super user (Projects Sponsor)	Date
☐ **No, DIA not required (End here)** N.B. Retain in Project file			
☒ **Yes, DIA required** Proceed to Step 2: The Evidence Base	Sophie Moeng Consultation Manager		

Step 2: The Evidence Base

Q4. Record the data you have gathered about the diversity of the people potentially impacted by this work
e.g. from the 2011 national census or from HR Shared Service.

You should also include any research on the issues affecting inclusion in relation to your work.

Consider the following protected characteristics:

- **Disability** (including those with physical, mental and hidden impairments as well as **carers** who provide unpaid care for a friend or family member who due to illness, disability, or a mental health issue cannot cope without their support)
- **Age**
- **Pregnancy/maternity**
- **Race**
- **Religion or belief**
- **Gender**
- **Sexual orientation**
- **Marriage/Civil Partnership**
- **Gender reassignment**

Q4. Data you have gathered about the diversity of the people potentially impacted by this work

Please read the Q4 guidance in 'Guidance: how to complete the Network Rail DIA form'

See Appendix A

Step 3: Impact

Q5. Given the evidence listed at 'Step 2: The Evidence Base', what potentially negative impacts could this work have on people with protected characteristics?

Please read the Q5 guidance in 'Guidance: how to complete the Network Rail DIA form'

Q5a. Please select all the protected characteristics your work could potentially have a negative impact on

- [x] **Disability**
  e.g. the impact of a new online process on dyslexic staff, or the impact of changes to how passengers get to a platform on someone who cannot use stairs
- [x] **Age**
  e.g. the impact of changes to long-service benefits on younger and older staff, or the impact of a long alternative route to close a level crossing on an older person with long-term health issues
- [x] **Pregnancy/maternity**
  e.g. the impact of team relocation on a woman who is on maternity leave, or the increase in height of a footbridge over the railway
- [ ] **Race**
  e.g. the impact of psychometric testing on the recruitment of people who don't have English as a first language, or the gentrification of an area following station redevelopment that makes retail outlets too expensive for local businesses
- [ ] **Religion or belief**
  e.g. the impact of a new expenses policy on meal times or the closure of a level crossing between a community and its place of worship
- [x] **Gender**
  e.g. the impact of a local decision to adopt arbitrary 'core hours' on women who are more likely, but not always managing childcare issues, or the impact of changes in parking policies on women who are more likely to start work later due to childcare issues
- [ ] **Sexual orientation**
  e.g. the impact of a decision to invite partners to an away day on a gay man who hasn't disclosed his sexual orientation, or the secondment of a lesbian member of staff to a project in a country where this would be a risk to life/human rights
- [ ] **Marriage/civil partnership**
  e.g. the impact of the extension of private health care to spouses
- [ ] **Gender reassignment**
  e.g. the impact of a decision to not let staff use taxis for late night events in high risk areas may adversely affect people who have had, or are undergoing, gender reassignment

Q5b. Explain the potential negative impact

Please state the characteristic and give an explanation

See Appendix A

Q6. What could you do to ensure your work has a positive impact on diversity and inclusion including supporting delivery of the Diversity and Inclusion strategy?

The programme is unique with lengthy timelines, therefore it will need to deliver the Everyone strategy during the construction phase and in the final design output. As there is a unique opportunity to design a station of the future, the project will consult with a range of people with protected characteristics to establish how the location, layout and station facilities can meet their needs.

We understand that accessibility is about much more than step-free access given the majority of disabled people are not mobility impaired so we will work with Network Rail's Built Environment Access Panel to ensure we deliver an inclusive design.

Consultation

It is important to involve and consult people with protected characteristics (e.g. young people, older people, people with disabilities, etc.) early on to help shape proposals so approaches to consultation need to work for as many people as possible. Without consultation, we cannot judge how our proposals will affect people, businesses and communities. This will have a positive impact for disabled people, including those with mobility, sensory and/or cognitive impairments.

Round One consultation

Venues chosen for the Round One consultation events were held in accessible buildings. Consultation boards displayed the same information on both sides and space was provided on both sides to minimise over-crowding for those with reduced mobility and people with pushchairs and buggies. Seating was provided for the elderly to view the boards, read consultation brochures and engage with members of the project team.

Round Two consultation

Project communications and messaging need to continue to be sensitive to and reflect a country and community recovering from the economic and societal impacts of the pandemic. Advice from Public Health England and the Government regarding COVID-19 restrictions will continue to influence the approach to public meetings and presentation of consultation materials closer to the time.

The traditional channels used to reach stakeholders will need to be adapted to use more remote digital methods to ensure stakeholders are given sufficient opportunity to engage with the proposed schemes. For those without internet access, may not wish or are unable to engage using a computer, tablet or smartphone, such as those with visual impairments, various ways to engage with the project team need to be offered: e.g. a dedicated consultation telephone hotline to allow conversations on the project proposals take place and feedback to be captured over the phone; requests can be made for printed (and potentially USB versions) of consultation materials and opportunity to engage via online webchat facility allowing real-time written exchanges. Warm up communications

Q6. What could you do to ensure your work has a positive impact on diversity and inclusion including supporting delivery of the Diversity and Inclusion strategy?

should be issued to give advance notice of online format and allow pre-registration for printed materials. Statutory bodies should be targeted directly through written correspondence (via email) and via existing working group meeting forums.

Disability and long-term health problems

Given the site context, it will be important to preserve and enhance access to recreational assets suitable for a wide range of people's enjoyment irrespective of impairments. Prior to construction, Network Rail and its contractors should consider conducting walk-throughs or discussions of diverted routes with representatives from consultation groups with protected characteristics, to review signage and route safety and understand the difficulties they may face. Positive impacts could result in:

- Ensuring diverted pedestrian and cycle routes are step-free, well-lit and free of surface hazards – important for all users but particularly those with who use mobility aids, have reduced mobility or are visually impaired;
- installation of protected temporary crossing points on diverted pedestrian and cycle routes;
- clear signing of any pedestrian and cycle diversions and early advertising of any changes, including approaching pavements and bus stops;
- providing signs that contrast visually with their background– particularly important for those with visual impairments;
- ensure temporary structures are minimised – particularly those with who use mobility aids, have reduced mobility or are visually impaired;
- ensure construction compounds are fenced off to prevent/inhibit unauthorised access – particularly important for suicidal individuals
- assess any changes in route which may impact on those with dementia and mental impairments as they may be unaware of where to go;

Final design

The proposed scheme will have positive impacts on the availability and physical accessibility of transport, especially people with mobility impairments; the DfT requires new stations to provide step free access so passengers can move independently from pavement to platform using lifts or a footbridge and onto the train, with staff support if needed.

The station will include aspects such as lighting, seating, legibility, consistency, accessible ticket machines and good interchanges. This is a positive impact for disabled people, including those with mobility, sensory and/or cognitive impairments. Seating will be proposed along the length of the platforms so that dwell times can be managed without sacrificing passenger comfort.

Crowding has greater consequences for passengers with disabilities who tend to have longer journeys and less flexibility to change them. The proposed scheme could help

Q6. What could you do to ensure your work has a positive impact on diversity and inclusion including supporting delivery of the Diversity and Inclusion strategy?

improve the travel experience of those with a disability as, depending on the desired destination, the new station could offer quicker and more reliable journey times. This may encourage more people in this protected characteristic group to take up rail travel.

Facilities and access – outside the station

The station should be clearly and consistently signposted in the surrounding area. The path to Francis Crick Avenue should have clear markings for pedestrians and cyclists and the footway and the road should be at the same level to help wheelchair users. For people with visual impairments, the lack of a kerb edge would make it difficult to know where the footway ends and the road begins so consider a strong tonal contrast between the footway and carriageway or tactile paving and the crossing on the station access road to have audible signals and white strips.

Research has found that of all the people with a disability who were able to walk at all, approximately 30 % could manage no more than 50 metres without stopping or severe discomfort and a further 20 % could only manage between 50 and 200 metres. The project team should consider providing seats on the station forecourt to offer places to rest for people who tire easily and those who need to sit whilst waiting to be collected or for assistance to arrive. The seating should be highly visible, with a bold side profile, and in a colour and luminance that contrast with immediate surroundings and surfaces to assist those with visual impairments.

The project should consider a pedestrian crossing across the station entrance to allow all users to cross safely.

On the west, on Hobson's Park, the project should provide a lit, level access path from the Guided Busway suitable for all users, in particular users of mobility aids. Upgrade of the existing paths where appropriate should be discussed with stakeholders. The project should consider how to denote this is a shared footway and cycleway for those with visual impairments.

The project should provide parking bays for Blue Badge holders, passenger pick up / set down and taxi bays with lowered kerbs or level access with the road. The Blue Badge bays should be closest to the station building and cater for those who need longer bays.

Help points can provide a vulnerable person with a means of contacting someone for help and information, for example when Passenger Assist has been booked. Clearly marked help points should be positioned closest to the Blue Badge bays and should feature braille for those with visual impairments and induction loops for those with hearing impairments. The project should also provide Automated External Defibrillators (AEDs)..

Given that Cambridge is Britain's everyday-cycling capital and the proximity of the Biomedical Campus, there is likely to be a high number of cyclists who use 'of gauge' cycles (e.g. cargo cycles or cycles with trailers used by families) or those who use their

Q6. What could you do to ensure your work has a positive impact on diversity and inclusion including supporting delivery of the Diversity and Inclusion strategy?

cycle as a mobility aid. In addition to spaces for larger sized cycles, consideration should be given to providing dedicated, secure, inclusive spaces for cycles such as handcycles, recumbents and trikes which are typically longer and wider than standard two-wheeled bicycles, preferably make it possible to enter and exit the inclusive cycle parking spaces 'by moving forward' because many cyclists with disabilities cannot reverse out. There should have a dismounting area on the side (this can be shared with adjacent spaces) where people unpack their walking assistance.

Facilities – inside the station

Being able to speak to staff when navigating the station outside of the gatelines, purchasing tickets and planning a journey can be very important for some passengers, particularly the elderly, those with dexterity impairments, mental, intellectual or sensory impairments. Where installed, ticket counters should be of variable height or fixed multiple height design (for both staff and users), have space or a shelf for luggage or mobility assistance and have hearing induction loops and large font on signs for those with hearing or visual impairments. Ticket vending machines should be designed to be easy to use by people with limited mobility and dexterity and staff available to provide assistance who require it.

Train running information needs to be provided in various forms: visual (rail industry standard summary and platform CIS screens), audio (long line public announcement in times of disruption) and personal (station staff and on-platform information help points). Information within the station should be clear and consistent. Clearly marked help points should be positioned at prominent locations within the station, such as on all platforms and in both concourses, so all passengers can clearly identify a means of contacting another person who can help. Samaritans signage should be provided at each help point to encourage vulnerable people to seek help. Help points should have push button and a hearing loop and general hearing loop points for announcements. Alarm systems should include the use of visual beacons for people with hearing impairments.

The configuration of passageways and corridors, design of the platforms and the position of stairs and lifts should be carefully considered during detailed design for flow of passengers and ensuring surveillance throughout is maximised, isolated areas and vulnerable points of access to the network or places where at risk people might hide prior to making a suicide attempt are not created. Wider ticket barriers should be available to access platforms.

All platforms are to have tactile markings at the platform edge and have yellow cross hatching.vulnerable people subsequently have to deal with the dilemma of stepping into this area to gain access to the running line whilst at the same time potentially exposing themselves to increased surveillance from, amongst others, rail staff and passengers.

Anti-trespass panels should be installed at the platform ends to deter people from entering the track area. Access points onto the platforms need to be carefully considered in order to ensure surveillance and 'intervention' opportunities are maximised. There

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should be no isolated accesses where people can come onto the platforms and loiter without being detected.

Human preventions are more important than physical preventions. Samaritans deliver training to rail staff to equip them with tools to deal with vulnerable people at stations. NR will work closely with the TOC in future stages and recommend these measures are in place.

Doors should be easy to open by people with limited strength – the project should consider automatic or assisted opening mechanisms, heights and styles of handles, heights of kick-plates and design of furniture. Main doors could be double width.

Provisions for guide and assistance dogs such as water bowls should be considered by the TOC to make the station accessible for those with guide and assistance dogs.

Lifts will provide step free access from pavement to platform, onto the train, with staff support if needed, benefitting all users but particularly those with pushchairs, older people, those with reduced mobility and those with visual impairments; these groups may also benefit from assistance by trained station staff.

There should be two lifts to access each platform with space for a wheelchair to turn around in, appropriate lighting / use of mirrors to reduce the impacts of claustrophobia, handrails, flush threshold and anti-slip surfaces.

A lift lobby area is recommended for consideration to reduce congestion around the lift area and to accommodate waiting lift users such as those with pushchairs or using wheelchairs. Controls for the lift should be within reach for a wheelchair user, have braille and tactile markings, a visual floor indicator, and feature an audible announcer. Lift reliability should be a priority consideration.

In designing the layout of the seats, space should be made available for wheelchair users to sit with their companions or carers and parents with pushchairs. A mixture of seating options, at standard or perch levels, with or without arms, should be provided but seats placed in a row should either all have armrests or no armrests; a mixture within a single row can cause difficulties for visually impaired people. Seating should be provided in the waiting room if available, on platforms and the concourse. This should make the station more accessible for users with mobility impairments and pregnant women.

Handrails and a landing on steps provide welcome, often essential, support to older people as they are likely to require extra support. The project should consider handrails and balustrades designed for people of different heights (especially considering children) – either by a second lower handrail. Handrails should use contrasting colours to be easily discernible to assist people with visual impairments.

On the stairs consideration should be given to the addition of a visual, high-contrast clue to the edge of each thread should help those with a visual impairment who might struggle to discern the difference in depth at a stairway or step.

Q6. What could you do to ensure your work has a positive impact on diversity and inclusion including supporting delivery of the Diversity and Inclusion strategy?

The internal design of the station will need to take into account environmental comfort levels such as thermal comfort levels, ventilation, natural daylight and acoustics for users with visual impairments, ensuring there is a colour contrast between surfaces (such as floor and walls, seat and arm rest, stairs and handrail) and to provide a calming atmosphere for all users, particularly those who have a non-visible disability. Other considerations to be made will include lighting transitions and reflectiveness of surfaces.

In addition to accessible toilets, a Changing Places toilet will need to be provided in the new station to cater for those who are not able to use the toilet independently.

Good use of lighting will help to promote the overall feeling of safety and security as passengers can see around them with no dark areas. Good uniform lighting maintains natural surveillance during the hours of darkness and contribute to the overall feeling of security. Lighting that compliments CCTV will help to capture good quality images even during the hours of darkness. CCTV also adds to feelings of safety.

Footbridges should be conveniently positioned on the platform near to access points or where there is a natural desirable foot flow. To prevent jumping from the footbridge, the most effective measure will be a physical barrier which restricts access to the drop. This should take the form of higher parapets, adding to the height with fencing or encasing the bridge completely. There should be no footholds or climbing points to ensure the parapet cannot be easily scaled. The configuration of the supporting structure should be carefully considered so little or no isolated areas underneath the bridge is created. If vulnerable areas are identified, consideration should be given to fencing or blocking off as much of the area as possible. **Age**

During the short term, the construction of the new station could result in the creation of a number of local jobs including apprenticeships. In addition, the new station will improve access to jobs in Eastern England.

The new station will be required to provide step-free access from street to train and include aspects such as lighting, seating, legibility, consistency, and accessible ticket machines. This is a positive impact for older people who might have limited mobility and those with young children, particularly with buggies. The scheme is also expected to increase connectivity for all ages and will particularly benefit young and older residents in South Cambridgeshire who are more reliant on public transport.

During construction

Construction compounds will need to be fenced off so people cannot get into exclusion zones or access work sites. This provides a safety benefit to all users but particularly important for young children and teenagers. Paths around compounds will need to be clearly waymarked to help people navigate around them safely, particularly those with reduced mobility or with children.

An important consideration will need to be given to the temporary diversion of NCN Route 11 as the diversion will create longer journey distances and times for those who are elderly, have reduced mobility or are accompanied by children, particularly taking into

Q6. What could you do to ensure your work has a positive impact on diversity and inclusion including supporting delivery of the Diversity and Inclusion strategy?

account the distances these groups are able to walk. The change in route may impact on those with dementia and mental impairments as they may be unaware of where to go.

Construction areas for the formal paths on Hobson's Park will need to be fenced off as Where possible, the project should consider the sequencing of construction on Hobson's Park to avoid work during school holidays to minimise interaction with children.

Construction communications should be planned to ensure the maximum number of people can understand them using appropriate channels to distribute information on diversions, deliveries, timings. Consider using areas such as community facilities and online channels such as social media.

Baby change facilities will need to be provided in both male and female toilets, if considering, to cater for all childcare providers.

It is important that the design also takes into account the demand an aging population will place upon the future usage to ensure the longevity of the functionality of the station. Provisions for other issues related to old age, such as loss of eyesight and hearing should be considered (such as hearing induction loops and large font on signs). Dementia is more common in people over the age of 65. These users could have difficulty navigating the station; clear signage should aid them.

Race

It is not anticipated that the new station will impact upon the population as a result of their ethnicity. However, given the international reach of businesses and hospitals on the Cambridge Biomedical Campus who would use the new station, station announcements and signage will need to be clear to aid navigation around the station for those users with limited English proficiency.

Gender

The station is not expected to have an adverse impact on the population due to their gender however it should be designed to be as safe as possible for all users, but in particular consider appropriate lighting in places where women may feel more vulnerable (such as the ends of platforms), avoid the creation of isolated areas and provide CCTV for personal safety.

Given its proximity to the hospitals, consideration to ensuring the station and approach is safe for women to use when it gets dark is very important; women make up a higher number of health care workers than men.

Compared to other industries the construction industry has a disproportionately high number of suicides; there are more male workers (80% of the workforce) and men are far more likely to take their lives than women. Network Rail and its contractors should continue to promote and recognise mental health discussions to educate all workers to recognise the signs and causes of stress and provide tools to help legitimise feelings of stress and anxiety early on before they turn into depressive and suicidal thoughts.

Q6. What could you do to ensure your work has a positive impact on diversity and inclusion including supporting delivery of the Diversity and Inclusion strategy?

Religion

The construction of the station is not anticipated to impact upon any places of worship, although any construction routes and deliveries of materials should take into account the location of places of worship, particularly on holy days and holy religious holidays.

Pregnancy/maternity

The station will be required to be accessible with step free access from street to train. This will also include aspects such as lighting, seating, legibility, consistency, and accessible ticket machines. This will help improve the experience of those who are pregnant or with young children as they will be able to better navigate the transport system with buggies.

Given that the new station will serve patients attending the Rosie maternity hospital on the Cambridge Biomedical Campus there would likely be a higher number than usual of pregnant women using the station.

The station design should consider the inclusion of a breast-feeding room/area for mothers who want privacy when breastfeeding.

Sexual orientation

It is not anticipated that the new station will impact upon the population as a result of their sexual orientation however good lighting, avoiding isolated areas and CCTV will encourage personal safety.

Gender reassignment

Good lighting, avoiding creating isolated areas and CCTV will encourage personal safety. The toilet facilities will be discussed with TOCs in outline design.

Marital status

It is not anticipated that the new station will impact upon the population as a result of their marital status.

Step 4: Consultation

Q7. How has consultation with those who share a protected characteristic informed your work?

Please read the Q7 guidance in 'Guidance: how to complete the Network Rail DIA form'

Groups consulted	What issues were raised in relation to one or many of the protected characteristics (Q5)?
Built Environment Access Panel (BEAP)	Network Rail presented to BEAP in GRIP 2 and GRIP 3. These comments were from 7 November 2019 when station building was not in scope: Key considerations raised by BEAP for consideration in GRIP 3: • Employ an access consultant to input into project. • Concerns regarding unstaffed footbridges and their location on the platform – feedback from panel to install the footbridges in the middle of the platform if possible. • Feedback from panel to provide a justification for the number of blue badge parking bays, wide bay parking and adapted pickup areas for next BEAP presentation. • Evacuation plans required for the design. Outputs to be presented at the next BEAP • Feedback from panel to consider two lifts per platform instead of one lift. Contingency against lift breakdown. • Site and station location situated in an exposed area subject to harsh weather conditions, consideration for passenger and station user well-being. • Engage with local hospitals and coordinate patient participation groups. Review station designs of similar scale and in close proximity to Refer to CAMBS North Lessons Learned
People living and working in the area in which the proposed station would be located, including people living in areas south of the Cambridge, Trumpington, Queen Edith's Ward, parishes of Little Shelford, Great Shelford, Haslingfield, Harston, Sawston, Grantchester and Hauxton. Stakeholders including the councils, local cycling groups, statutory consultees, councillors, Members of Parliament and the British Transport Police.	Network Rail conducted a public consultation exercise between 20 January and 2 March 2020 (Round One consultation). The key issue raised by the consultation responses specific to a protected characteristic concerned request to provide step-free access at the station and consider accessibility needs of users who would visit the healthcare facilities on the Campus. Network Rail responded that the station and access to it would support step-free access. For further information on all responses to issues following this round of consultation, please see the Round One consultation feedback report (eB ref to be provided in due course).

Groups consulted	What issues were raised in relation to one or many of the protected characteristics (Q5)?
Cambridge City Council Access Officer	Network Rail met with the Access Officer on 30 January 2020. Key considerations raised: • This station will be used by more disabled people than the average one, therefore support staff to help with ramps etc. will be very important. • There should be as many blue badge parking spaces and drop off spaces as possible. • Any lifts should be as large as possible, preferably taking two wheelchairs. • Platforms that are served by lifts should have stair climbing platform lifts mounted on their staircases to use if main lift fails. • A Changing Places and a standard accessible toilet would be needed. • Seating in waiting room needs to vary in height, some with armrests and some spaces for wheelchair users to sit alongside their carer/companion in the fixed seating. Any ticket, vending machines, counters, etc, should have sections that are suitable for wheelchair users.
Cambridge City Council Access Officer	Network Rail held a telephone call with the Access Officer on 22 April 2020. Key considerations raised: • Northern location preferred as best option for access to hospitals and easiest for most pedestrians and cyclists as there is a dropped kerb • Any paths to have tactile paving – this will make the pedestrian route easier for people with visual impairments to use • Paths on Hobson's Park need to be suitable for wheelchairs, with a consolidated (i.e. not loose) surface • Blue Badge parking needs to be as close to the station entrance as possible • if accessible toilets were provided on both sides of the station, only one would need to be a Changing Places facility • need for good signage • consider hazards from glazing for visually impaired, e.g. glare from windows, confused reflections etc • also consider glare of light reflected from floors—can be disorientating • possible need for stair-mounted lifts to be used if main lifts break down use of 'refuge points' on the island platform on the basis this doesn't offer an equal opportunity for wheelchair users to get off the platforms themselves which able bodied persons get through the secondary means of escape stairs
Cambridge City Council Access Officer, Disability Cambridgeshire and Cambridge University Health NTS Trust.	Network Rail chaired a joint discussion with this group on 29 April 2020. Key considerations raised: • Need to consider installing a safe crossing on Francis Crick Avenue for increased volume crossing the road • Access from the west across Hobson's Park – need to consider all-weather surface, lighting considerations • Station needs to be staffed to assist passengers when needed; wheelchairs need ramps to enter/leave trains

Groups consulted	What issues were raised in relation to one or many of the protected characteristics (Q5)?
	Consider waiting area for those with neurodiverse conditions
Cambridge City Council Equality Officer	Network Rail held a telephone call with the Equality Officer on 12 June 2020. Key considerations raised: • Consider size of lifts to accommodate mobility scooters, not just wheelchairs • provision of gender-neutral toilets (cubicles with wash basins) in addition to gender specific toilets is best practice – provides privacy and safety for those who are transgender, dependent on space within station buildings. • providing baby changing facilities in male and gender-neutral toilets to cater for all childcare providers and the possibility for a quiet space for breast feeding and a prayer room, depending on space. • wayfinding for the station - 48 different languages are spoken in the Southern fringe with 77 % of survey respondents having English as a first language. Recommend that NR undertakes an EqIA to demonstrate consultation has been inclusive
Built Environment Access Panel	Network Rail presented to BEAP on 2 July 2020 post addition of station building into scope but in advance of developed or optimised design: • Panel reiterated importance of employing an access consultant in particular to capture detailed feedback and to make sure proper consideration is given to the needs of people with different disabilities • Panel commented that a 1:21 ramp would be preferable to a 1:20 ramp • Parking spaces must be 3.6 m wide [this is reflected in the design]. • Panel welcomed the inclusion of a changing room changing places toilet [Designer confirmed this was in line with British standards sizing requirements.] • Panel members advised that design must consider the movement of people all the way to rail replacement buses (if applicable) including the positioning of dropped curbs. • A mix of cycle parking was emphasised [Designer confirmed that this was being actively considered.] • There are different opinions on the arrangements of parking and whether they should be parallel or not. Some members preferred front exit another side exit - panel advised that spaces should be 6.6 m long and 3.6 m wide and that exit and entry to vehicle must not conflict with traffic on the road. [Designerconfirmed spaces would be of these dimensions and panel therefore agreed that **parallel parking** was preferred as the size of the bays would allow side and rear exit from vehicles without being in the flow of traffic.]

Commented [DS1]: I would not have thought this was at all common at stations. Maybe a major terminal or airport only.

Groups consulted	What issues were raised in relation to one or many of the protected characteristics (Q5)?
	• Non-standard cycle floor hooks placement needs to be considered with regards to visually impaired people. • Consideration should be given to fitting lifts with mirrors. • The centrally located island refuge was not preferred. The team advised that the fire strategy had not yet been developed once this was developed it would be shared with the BEAP for input. Panel agreed with the aim to provide 2x lifts in each area of vertical circulation but requested clarification on where 1400x1950mm have previously been used as these are different from NR standard (1600x1600mm).
Guide Dogs for the Blind Association	Network Rail held a telephone call with a volunteer from the Association who has a Guide Dog on 8 September 2020. Feedback was: • Staff provided outside of the gatelines to provide assistance. • Have voice activated systems within the station environment to direct the user to where toilets and lifts are. • On station forecourt, provide tactile markings positioned to denote where the pavement ends and the road begins as guide dogs are trained to recognise these. • Provide a controlled crossing with audible signals across station access road. • Useful to have a 'dog spend' facility at the station
Guide Dogs for the Blind Association	Network Rail held a telephone call with a volunteer from the Association who is severely visually impaired on 25 September 2020. • Having areas for pedestrians and vehicles clearly marked out (use colour contrast to indicate a difference in function, textured path surface, tactile paving) is most beneficial for those with a visual impairment. • Provide a white strip on the raised crossing on the station access road. • Provide a defined waiting area outside the lifts, e.g. break in the hand-rail or change in floor surface for the waiting area. • Consideration should be given to fitting lifts with audible announcements ,e.g. platform level and footbridge, to help people with vision impairment get off on the floor they've selected and lifts to have textured or Braille markings on bank of buttons. • it's useful for the door to have lever handles and there is colour contrast within toilets to denote the walls and door. • Provide a visual, high-contrast clue to the edge of the step to help user discern the difference in depth at a stairway or step. • Colour contrasted seats on platforms and waiting area • Provide clear indicator boards

Groups consulted	What issues were raised in relation to one or many of the protected characteristics (Q5)?
Samaritans	Network Rail held a telephone call with the Deputy Director for Outreach from the charity on 13 October 2020. • Install anti-trespass panels at the platform ends to deter people from entering the track area. • Access points onto the platforms need to be carefully considered in order to ensure surveillance and 'intervention' opportunities are maximised. There should be no isolated accesses where people can come onto the platforms and loiter without being detected. • Human preventions are more important than physical preventions. Samaritans deliver training to rail staff to equip them with tools to deal with vulnerable people at stations so recommendTOC staff are supported and trained appropriately.
People living and working in the area in which the proposed station would be located, including people living in areas south of the Cambridge, Trumpington, Queen Edith's Ward, parishes of Little Shelford, Great Shelford, Haslingfield, Harston, Sawston, Grantchester and Hauxton. Stakeholders including the councils, local cycling groups, statutory consultees, councillors, Members of Parliament and the British Transport Police.	Network Rail conducted a second public consultation exercise between 19 October and 29 November 2020 (Round Two consultation). Summaries of issues raised during this consultation of specific relevance to protected characteristics have been covered in recommendations above. Details of consultation comments are available within the project consultation report.

Q8. Record any consultation you have had with Network Rail teams who are delivering work that might overlap with yours.

This will ensure that our solutions are joined up.

C3R renewals project is due to deliver works in advance of CSIE project. Interface meetings have been held for the last 2 years to aim to integrate the projects as smoothly as possible.

Step 5: Informed Decision-Making

Q9. After completing Steps 1–4, what is your decision?
Please select one of the following (for most DIAs this will be option 1) and provide a rationale.

Please read the Q9 guidance in 'Guidance: how to complete the Network Rail DIA form'

- ☒ **1 Change the work** to mitigate against potential negative impacts found
- ☐ **2 Continue the work** because no potential negative impacts found
- ☐ **3 Justify and continue the work** despite negative impacts (please provide justification)
- ☐ **4 Stop the work** because discrimination is unjustifiable and there are no obvious ways to mitigate

Q9b. Rationale for decision

Many of the negative impacts will be mitigated through the design process or during construction. Any main contractor working on this project will need to sign up to the Considerate Constructors Scheme (CCS).

A Code of Construction Practice and Construction Environmental Management Plan will be developed and agreed with the Local Planning authority before construction begins and we will engage with stakeholders on the Cambridge Biomedical Campus prior and during construction via the CBC Construction Group.

We will discuss construction methods, working hours and mitigation measures to minimise pollution during the construction period.

Step 6: Action Planning

Q10. What specific actions will be taken to deliver positive impacts and address any potentially negative impacts identified at 'Step 3: Impact' or through consultation?

Please read the Q10 guidance in 'Guidance: how to complete the Network Rail DIA form'

Action	By when?	By whom?
Covid-19 restrictions on physical contact during Round Two consultation For those without internet access, may not wish or are unable to engage using a computer, tablet or smartphone, such as those with visual impairments, various ways to engage with the project team will be offered at the next round of consultation: • a dedicated consultation telephone hotline will be established to allow conversations on the project proposals take place and feedback to be captured over the phone; • requests can be made for printed copies of consultation materials and • opportunity to engage via online webchat facility allowing real-time written exchanges • warm up communications should be issued to give advance notice of online format and allow posting for printed materials.	Round Two consultation launch on 19 October	Consultation Manager
Accessibility impacts on groups – Disability, Age, Pregnancy/maternity, Gender and Sexual orientation The designer reviews the DIA to consider impacts and recommendations and makes reasonable adjustments to the design to ensure that established station and public realm accessibility guidelines and NR and DfT standards are followed to deliver a safe, accessible and inclusive environment.	GRIP 3 and 4	NR/Designer

Action	By when?	By whom?
Challenges during construction from diversions, noise, dust, access to live railway Conduct discussions or walk-through of diverted routes with representatives from consultation groups with protected characteristics, to review signage, route safety, diversion wayfinding and security arrangements around site compounds, especially at night.	GRIP 5	Contractor

Step 7: Publication

- Please retain copies of this and all completed DIAs in a suitable shared repository.
- Customer-related DIAs may be published on our website.

Appendix: continuation sheets

Question number:

Additional/continued response

Continuation sheet

Question number:

Additional/continued response

Continuation sheet

Question number:

Additional/continued response

Diversity Impact Assessment
Cambridge South Infrastructure Enhancements

Appendix A DIA Supporting Information

158454-NWR-00-ZZ-ASS-MPM-500004

Step 2: The Evidence Base

Please find below further details on the evidence base:

Q3. Record here the data you have gathered about the diversity of the people potentially impacted by this work e.g. from the 2011 national census. You should also include any research on the issues affecting inclusion in relation to your work.

Consider evidence in relation to all the protected characteristics:

- Disability including Carers[1]
- Pregnancy/maternity
- Religion or belief
- Sexual orientation
- Age
- Race
- Gender
- Marriage/Civil Partnership

The main source of data used in the baseline profiling of the study area in South Cambridgeshire at this stage is Census 2011 data from the Office for National Statistics (ONS). There has been some change in the study area's demographics within the last 9 years, so profiling includes data from the Cambridge Southern Fringe survey [2]. This survey took place in 2018 and canvassed residents in the Clay Farm (Great Kneighton), Glebe Farm, Ninewells and Trumpington Meadows developments, located on the Cambridge Southern Fringe.

The data has revealed key statistics which it will be important to take into account of in all stages of the proposed development.

As of March 2011, the total population for South Cambridgeshire was 148,775.

Disability including Carers

Table 1 sets out the number of residents within South Cambridgeshire whose daily lives are impacted by a long-term health problem or disability that has lasted, or is expected to last, at least 12 months. This includes problems that are related to old age.

Table 1 Living with a long-term health problem or disability in South Cambridgeshire

Level of limitation/Age	South Cambridgeshire		South Cambridgeshire %		England %	
	Day-to-day activities limited a lot	Day-to-day activities limited a little	Day-to-day activities limited a lot	Day-to-day activities limited a little	Day-to-day activities limited a lot	Day-to-day activities limited a little
Age 0 to 15	299	532	0.20 %	0.36 %	0.29 %	0.42 %
Age 16 to 24	251	400	0.17 %	0.27 %	0.22 %	0.36 %
Age 25 to 34	291	544	0.20 %	0.37 %	0.33 %	0.52 %
Age 35 to 49	885	1,594	0.60 %	1.09 %	1.11 %	1.42 %
Age 50 to 64	1,372	2,900	0.93 %	1.98 %	1.91 %	2.31 %
Age 65 to 74	1,260	2,545	0.86 %	1.73 %	1.42 %	1.93 %
Age 75 to 84	1,771	2,690	1.21 %	1.83 %	1.58 %	1.73 %
Age 85 and over	1,522	1,058	1.04 %	0.72 %	1.00 %	0.59 %
Total	**7,651**	**12,263**			**4,098,808**	**4,838,146**

Source-ONS 2011 census

Nearly 20,000 people of all ages (13.5 % of the population) are limited in their day-to-day activities due to either a health problem or a disability. Those aged over 50 make up 75 % of this total. Those aged 85 or over in South Cambridgeshire are marginally more limited in their day-to-day activities compared to those in England as a whole.

[1] Including those with physical, mental and hidden impairments as well as **carers** who provide unpaid care for a friend or family member who due to illness, disability, or a mental health issue cannot cope without their support

[2] [2] https://cambridgeshireinsight.org.uk/wp-content/uploads/2019/07/Southern-Fringe-Survey-Report-FINAL.pdf

Table 2 provides information about the number of providers of unpaid care and the number of hours of care that they provide.

Table 2 Carers who provide unpaid care and number of hours

Carers/hours	South Cambridgeshire	South Cambridgeshire %	England %
Provides 1 to 19 hours unpaid care a week	11,138	7.49 %	6.51 %
Provides 20 to 49 hours unpaid care a week	1,409	0.95 %	1.36 %
Provides 50 or more hours unpaid care a week	2,444	1.64 %	2.37 %

Source-ONS 2011 census

There is a higher proportion of carers who provide up to 19 hours unpaid care a week in South Cambridgeshire than in England as a whole.

Given that the new station will serve patients attending hospitals on the Cambridge Biomedical Campus there is likely to be a higher number than usual of passengers with a long-term health problem or disability and those who are frail and vulnerable. Funding was announced in October 2020 for a new cancer hospital at Addenbrooke's so some patients may be passengers rather than make their journey by car.

Additionally, as Cambridge is Britain's everyday-cycling capital, research[3] also shows that most disabled cyclists use their cycle as a mobility aid and can't physically dismount and walk or wheel their cycle.

Different types of disabilities will also need to be considered as not all disabilities are physical or visible.

The likelihood of a location being used for suicide may be increased if there are facilities used by vulnerable persons in close proximity. Addenbrooke's Hospital has two psychiatric wards and a Liaison Psychiatry Service is provided on site. In 2017/2018 there were 117,074 A&E attendances[4].

Table 3 shows the number of suicides registrations in Cambridgeshire.

Table 3 Number of suicides registrations in Cambridgeshire

Area	Number of registered suicides	Cambridgeshire %
Cambridge	8	12.12 %
East Cambridgeshire	7	10.61 %
Fenland	14	21.21 %
Huntingdonshire	20	30.30 %
South Cambridgeshire	17	25.76 %
Total	**66**	

Source-ONS 2018

In 2018 South Cambridgeshire had the second highest number of registered suicides in Cambridgeshire.

Age

Table 4 indicates the age of residents within South Cambridgeshire at the time of the 2011 census.

Table 4 Age of residents within South Cambridgeshire

[3] https://www.sustrans.org.uk/media/5949/bikelife19_greater-cambridge_web.pdf

[4] https://www.cuh.nhs.uk/about-us/our-profile/facts-and-figures

Age	South Cambridgeshire	South Cambridgeshire %	England %
Age 0 to 4	9,300	6.25 %	6.26 %
Age 5 to 7	5,483	3.69 %	3.45 %
Age 8 to 9	3,578	2.41 %	2.16 %
Age 10 to 14	9,106	6.12 %	5.81 %
Age 15	1,946	1.31 %	1.23 %
Age 16 to 17	3,789	2.55 %	2.48 %
Age 18 to 19	2,999	2.02 %	2.59 %
Age 20 to 24	7,148	4.81 %	6.78 %
Age 25 to 29	8,083	5.43 %	6.89 %
Age 30 to 44	31,957	21.48 %	20.64 %
Age 45 to 59	30,908	20.78 %	19.39 %
Age 60 to 64	9,756	6.56 %	5.98 %
Age 65 to 74	13,139	8.83 %	8.59 %
Age 75 to 84	8,166	5.49 %	5.52 %
Age 85 to 89	2,244	1.51 %	1.46 %
Age 90 and over	1,153	0.78 %	0.76 %
Total	**148,755**		**53,012,456**

Source-ONS 2011 census

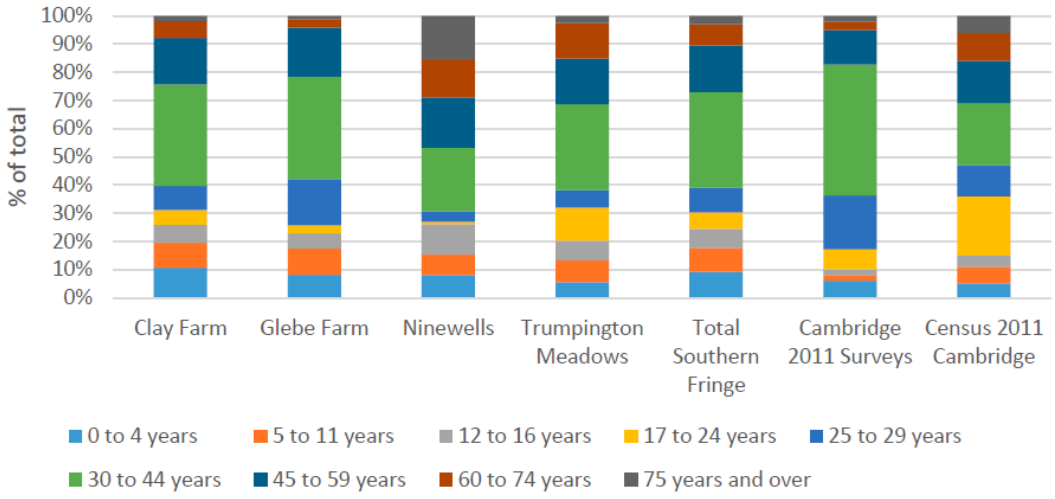
The elderly (defined as those over 60) total 34,458 and represent 23.2 % of the population of South Cambridgeshire (slightly higher than the elderly total in England). Aging can affect all senses, but usually hearing and vision are most affected, so it is probable that this age group is more likely to develop dementia, have sensory impairments, have reduced mobility and use mobility aids such as sticks, walking frames, wheelchairs and mobility scooters.

The project should also take into account the distances that children under the age of 4 (9,300 or 6.3 % of the population) are usually able to walk.

Cambridge Southern Fringe survey

The survey shows that the Southern Fringe developments have more children compared to both the 2011 Cambridge survey results and the Census 2011 data. For the Southern Fringe, 0-16-year olds make up almost one-quarter of the population, compared to 10 % of the population in the 2011 surveys, and 15 % of the population from Census 2011 (see Figure 1).

*Figure **Error! No text of specified style in document.**: Age structure of residents, Southern Fringe compared to 2011 surveys and 2011 Census*



Source - Cambridge Southern Fringe survey (May 2019)

Race

Table 5 indicates the ethnicity of residents within South Cambridgeshire at the time of the 2011 census.

Ethnicity	South Cambridgeshire	South Cambridgeshire %	England %
White	**138,787**	**93.30%**	**85.42%**
English/Welsh/Scottish/Northern Irish/British	129,812	87.27 %	79.75 %
Irish	1,094	0.74 %	0.98 %
Gypsy or Irish Traveller	485	0.33 %	0.10 %
Other White	7,396	4.97 %	4.58 %
Mixed/multiple ethnic groups	**2,524**	**1.70%**	**2.25%**
White and Black Caribbean	552	0.37 %	0.78 %
White and Black African	270	0.18 %	0.30 %
White and Asian	991	0.67 %	0.63 %
Other Mixed	711	0.48 %	0.53 %
Asian/Asian British	**5,540**	**3.72%**	**7.82%**
Indian	2,210	1.49 %	2.63 %
Pakistani	465	0.31 %	2.10 %
Bangladeshi	217	0.15 %	0.82 %
Chinese	1,189	0.80 %	0.72 %
Other Asian	1,459	0.98 %	1.55 %
Black/African/Caribbean/Black British	**1,268**	**0.85%**	**3.48%**
African	760	0.51 %	1.84 %
Caribbean	341	0.23 %	1.11 %
Other Black	167	0.11 %	0.52 %
Other ethnic group	**636**	**0.43%**	**1.03%**
Arab	253	0.17 %	0.42 %
Any other ethnic group	383	0.26 %	0.62 %
Total	**148,755**		**53,012,456**

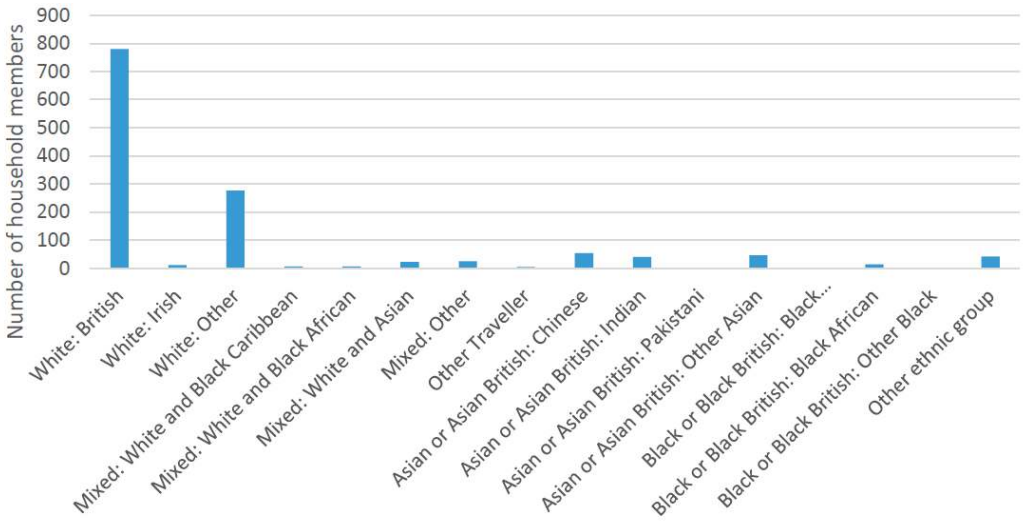
Source-ONS 2011 census

From the data above, South Cambridgeshire is identified as having a higher percentage of white residents and lower percentages of other ethnic groups compared to the rest of England.

Southern Fringe development survey

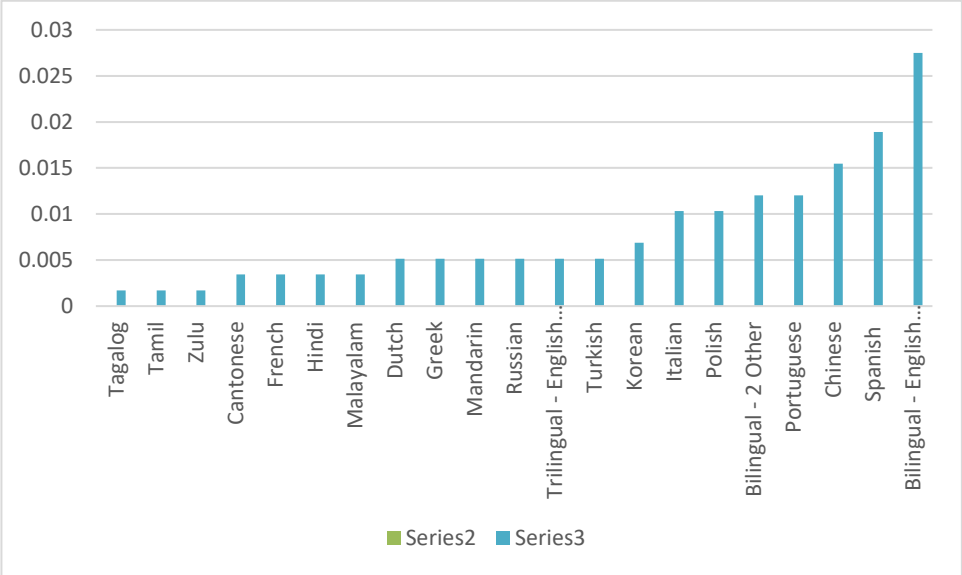
Figure 2 shows the ethnicity of residents who responded to the survey: 58 % are White British, White Other the second largest ethnic group (21 %), followed by Chinese and Asian Other (4 %) and Indian (3 %).

Figure 2 Ethnicity of residents in the Southern Fringe



Source - Cambridge Southern Fringe survey (May 2019)

The survey also shows that 48 different languages are spoken with English the first language for 77% of residents who responded. Figure 3 also highlights the diversity of languages (top 20) spoken within the Cambridge Southern Fringe developments.



Gender

Table 6 indicates the gender of residents within South Cambridgeshire at the time of the 2011 census.

Gender	South Cambridgeshire	South Cambridgeshire %	England %
Males	73,790	49.61%	49.18%
Females	74,965	50.39%	50.82%
Total	**148,755**		**53,012,456**

Source-ONS 2011 census

South Cambridgeshire is in line with the national ratio of more females to males in the population, with a slightly higher proportion of males and a slightly smaller proportion of females than in England as a whole.

A total of 35,000 staff travel to work or study on the CBC. Cambridge University Health NHS Trust employed 9,839 staff in 2017/2018[5], of which 74 % were female and 26 % were male. Front-line healthcare staff are expected to work a variety of shift patterns including days, nights, weekends and public/bank holidays to meet the needs of patients.

Religion

Table 7 indicates the religion of residents within South Cambridgeshire at the time of the 2011 census.

Religion	South Cambridgeshire	South Cambridgeshire %	England %
Has religion	**91,866**	**61.76%**	**68.09%**
Christian	87,463	58.80 %	59.38 %
Buddhist	700	0.47 %	0.45 %
Hindu	1,123	0.75 %	1.52 %
Jewish	362	0.24 %	0.49 %
Muslim	1,464	0.98 %	5.02 %
Sikh	186	0.13 %	0.79 %
Other religion	568	0.38 %	0.43 %
No religion	**44,741**	**30.08%**	**24.74%**
Religion not stated	**12,148**	**8.17%**	**7.18%**
Total	**148,755**		**53,012,456**

Source-ONS 2011 census

61.76 % of people in South Cambridgeshire class themselves as religious; this is significantly less compared with England as a whole. Christianity is the most prevalent religion at 58.8 %, followed by 0.98 % of the population identifying as Muslim.

Pregnancy/maternity

Table 8 indicates the number of live births and the general fertility rate of the residents within South Cambridgeshire in 2018.

Live births/ General Fertility Rate*	South Cambridgeshire	England
Live births	1,647	625,651
General Fertility Rate	61.2	59.2

Source-ONS 2018

* General fertility rate: number of live births per 1,000 women aged 15-44 per year, calculated using mid-year population estimates.

There are 2 more live births per 1,000 women aged 15-44 per year compared to England as a whole.

Given that the new station will serve patients attending the Rosie maternity hospital on the Cambridge Biomedical Campus there is likely be a higher number than usual of pregnant women using the station. In addition, funding for a new Children's hospital was announced in September 2020.

[5] https://www.cuh.nhs.uk/about-us/our-profile/facts-and-figures

Marriage/Civil Partnership

Table 9 indicates the marital status of residents in South Cambridgeshire aged 16 and over.

Marital status	South Cambridgeshire	South Cambridgeshire %	England %
Single (never married or never registered a same-sex civil partnership)	33,110	27.74 %	34.64 %
Married	66,819	55.99 %	46.59 %
In a registered same-sex civil partnership	277	0.23 %	0.23 %
Separated (but still legally married or still legally in a same-sex civil partnership)	2,594	2.17 %	2.65 %
Divorced or formerly in a same-sex civil partnership which is now legally dissolved	9,278	7.77 %	8.97 %
Widowed or surviving partner from a same-sex civil partnership	7,264	6.09 %	6.91 %
Single (never married or never registered a same-sex civil partnership)	33,110	27.74 %	34.64 %
Total	**119,342**		**42,989,620**

Source-ONS 2011 census

From the data above, South Cambridgeshire is identified as having a higher percentage of married residents compared to England as a whole.

Sexual orientation

No questions were included in the 2011 census on sexual orientation. Whilst there are experimental statistics on sexual orientation in the UK in 2018 by region, sex, age, marital status, ethnicity and socio-economic classification there is a lack of local statistics for South Cambridgeshire. However, based on responses to surveys between 2013 and 2015, the research by ONS found that 1.8 per cent of the Cambridgeshire population identified themselves as gay or lesbian – see Table 10.

	Estimate %	Upper %	Lower %
Inner London	3.1	3.5	2.7
Cambridgeshire	1.8	2.8	0.8
Greater Manchester	1.7	2	1.4
Devon	1.3	1.9	0.7
West Yorkshire	1.1	1.4	0.8
Lancashire	1.1	1.7	0.5
East Sussex	1.1	1.7	0.5
Dorset	1.1	2	0.2
Tyne and Wear	1	1.3	0.7
South Yorkshire	1	1.4	0.6
Outer London	1	1.2	0.8
Derbyshire	1	1.6	0.4
West Midlands	0.9	1.2	0.6
Somerset	0.9	1.4	0.4
Norfolk	0.9	1.4	0.4
Merseyside	0.9	1.2	0.6
Nottinghamshire	0.8	1.3	0.3

	Estimate %	Upper %	Lower %
Kent	0.8	1.2	0.4
Hertfordshire	0.8	1.2	0.4
Hampshire	0.8	1.2	0.4
Surrey	0.7	1.1	0.3
Oxfordshire	0.7	1.2	0.2
Leicestershire	0.7	1.2	0.2
Gloucestershire	0.7	1.3	0.1
Warwickshire	0.6	1.1	0.1
Essex	0.6	1	0.2
Worcestershire	0.5	1	0
West Sussex	0.5	0.8	0.2
Staffordshire	0.4	0.7	0.1
Northamptonshire	0.4	0.7	0.1
North Yorkshire	0.4	0.7	0.1

Source-ONS 2017, Subnational sexual identity estimates

From the data above, Cambridgeshire is identified as having one of the highest gay and lesbian populations in the country.

Step 3: Impact

Q5b. Explain the potential negative impact. Please state the characteristic and give an explanation

Protected Characteristic	Y/N	Explain the potential negative impact

Those with a disability or long-term health problem	Y	**During consultation and construction of the station:**
		• People who are visually impaired, have learning difficulties or have other print impairments such as dyslexia, may not be able to participate in the consultation and their views are not expressed.
		• Likely to be periods of greater traffic flow featuring heavy goods vehicles on roads without controlled crossings – these could cause concerns about safety for those with mobility, sensory and/or cognitive impairments and their carers.
		• Any temporary diversions for vehicles, cyclists and pedestrians may impact negatively on disabled people who may be less able to walk or cycle in difficult conditions or longer distances. This may also affect those with visual or cognitive impairments who may experience difficulties navigating new routes and locating bus stops.
		• Older people, those who have sensory impairments, dementia and those with cognitive impairments (such as Autism Spectrum Disorder) may become confused with temporary site logistics and how this affects their movement patterns around the site
		• Uneven or steep pavements could force those who have reduced mobility or have reduced poor health to venture into the road, either because the pavement is too hazardous or because crossing the uneven ground would require too much energy.
		• Temporary signs could pose a hazard:
		  ○ Excessive signage could be difficult for those who use mobility aids or have reduced mobility to navigate.
		  ○ The backs of the signs used on most construction sites are grey; these can be difficult for those with visual impairments to distinguish between the sign and the pavement.
		• Noise, dust and vibration from construction could impact those with hearing impairments, those with visual impairments who rely on their other senses to navigate and people with respiratory problems.
		• The presence of a construction compound itself with perceived access to stretches of high-speed rail track could pose an attractive means of suicide to vulnerable individuals.
		
		Challenges for accessing or using the new station:
		• There is always a risk that without the engagement with those with a disability or long-term health problem and unless the application of access standards in the designs are reviewed in context by an appropriate organisation (BEAP) that we will inadvertently not deliver a design that is not inclusive or includes appropriate suicide prevention measures.
		• Getting to the station: number of available parking bays for Blue Badge holders, proximity of parking to the station; closeness to the entrance or platform; steps and other objects to navigate (e.g. litter bins); cost of parking; the length of the permitted stay; poorly situated drop off points, lack of seating on forecourt, lack of help points and a crowded station forecourt.
		• Lack of accessible public transport to get to the station.

Protected Characteristic	Y/N	Explain the potential negative impact
		• Those with a disability or long-term health problem may be concerned about their security if the station is unstaffed. • Problems with ticketing: using ticket vending machines (e.g. machines not being appropriate for all passengers, including wheelchair users, those with dexterity disabilities, dyslexia, learning disabilities and vision disabilities), ticket office counter not being at a height suitable for wheelchair users; a lack of space or a shelf for luggage or mobility assistance; the presence of security screens can be a sound barrier for passengers who have a hearing impairment; lack of a ticket office or it is not always open, and the range of ticket choices is confusing and complicated. • Difficulty in negotiating the gap between the train and the platform, both physically and mentally as the "gap" can be seen as a potentially anxiety-inducing situation. • Lack of awareness of 'Passenger Assist' or problems with a booking. • Difficulty in finding exits and onward travel information, signs and instructions being difficult to follow. • Customer information boards and announcements are not suitable for some passengers with sensory impairments; display boards can be too small, announcements can lack clarity or be difficult to hear alongside the high levels of background noise in stations. • Lifts are too small for users of wheelchairs or mobility scooters. • Lack of lifts and ramps; particularly when these are out of order or in locations which are nonsensical. • Lack of adequate provision for those with reduced mobility to evacuate from platforms – 'refuge points' on the platform do not offer an equal opportunity for these users to get off the platforms themselves which able bodied persons can do. • Lack of accessible toilets and, for those who are not able to use the toilet independently, a Changing Places toilet. • Insufficient seats in the waiting room, on platforms and the concourse; no spaces for wheelchair users to sit alongside a carer or companion; and seating is not allocated or clearly marked. Those with conditions such as multiple sclerosis, Parkinson's, lung disease or heart conditions may struggle on their feet and need plenty of places to pause. • Stairs do not a landing to allow those who need time to pause and treads on stairs are a uniform colour, so no colour contrast for those with visual impairments. • Signage is not clearly marked, particularly for step free access or those with cognitive impairments. • Lack of leaning points or handrails or a landing to rest if negotiating the steps. • Doors are too heavy to open or close and are too narrow. • Surfaces are uneven and paving is uniform with no contrast between the edge of a platform and platform concourse. • The internal design of the station is uniform with no tactile paving, lighting or selection of surfaces that cause glare. • Many disabled people use handcycles, recumbents and trikes, which are typically longer and wider than standard two-wheeled bicycles; this group may experience challenges with cycle parking and storage facilities. • Fast non-stopping platforms can be a target for suicidal individuals as there is a greater opportunity available for the act to be completed. • There is poor lighting and potential vulnerable points of access to the network or places where at risk people might hide prior to making a suicide attempt. • There are dark and isolated areas which encourage the opportunity for trespass activity off the platform as well as criminal and anti-social activity.

Protected Characteristic	Y/N	Explain the potential negative impact
Age	Y	**During consultation or construction** • Older people may not be able to access information about the project via the internet, whether during consultation stages or whilst the station is being constructed. • Likely to be periods of greater traffic flow featuring heavy goods vehicles on roads without controlled crossings – these could cause concerns about safety for children and their parents, older people, and students on their way to nearby primary and secondary schools. • Longer or unfamiliar walking diversions around construction areas could impact those who are elderly or those with young children or with pushchairs. • Older people may also experience difficulties reading signage and navigating new routes, especially in dark conditions • Road and footpath closures and diversions could impact those who are elderly or those with young children or with pushchairs. • Uneven or steep pavements could force those who are elderly or those with young children or with pushchairs to venture into the road, either because the pavement is too hazardous or because crossing the uneven ground would require too much energy. • Temporary signs could pose a hazard. Excessive signage could be difficult for those who are elderly or those with young children or with pushchairs to navigate. • Noise, dust and vibration from construction could impact those who are elderly or those with young children or with pushchairs, particularly those who use Hobson's Park as a recreational amenity. • Deliveries of construction materials on local roads could impact children on their journey to school. **Challenges for accessing or using the new station:** • There is always a risk that without the engagement with older people and unless the application of access standards in the designs are reviewed in context by an appropriate organisation (BEAP) that we will inadvertently not deliver an inclusive design. • Older people may be concerned about their security if the station is unstaffed. • Getting to the station: poorly situated drop off points and the length of the permitted stay; steps and other objects to navigate; and crowded station forecourt. • Lack of accessible public transport to get to the station. • Problems with ticketing: using ticket vending machines (e.g. machines not being appropriate for all passengers); lack of a ticket office or it not always being open; signs too small, and the range of ticket choices is confusing and complicated. • Difficulty in negotiating the gap between the train and the platform, both physically and mentally as the "gap" can be seen as a potentially anxiety-inducing situation for those feel frail or vulnerable. • Lack of awareness of 'Passenger Assist' or problems with a booking. • Difficulty in finding exits and onward travel information, signs and instructions being difficult to follow.

Protected Characteristic	Y/N	Explain the potential negative impact
		• Customer information boards and announcements are not suitable for some passengers with sensory impairments; display boards can be too small, announcements can lack clarity or be difficult to hear alongside the high levels of background noise in stations. • Lack of lifts and ramps; particularly when these are out of order or in locations which are nonsensical. • Insufficient seats in the waiting room, on platforms and the concourse, and seating is not allocated or clearly marked. • Lack of leaning points or handrails. • Building doors are too heavy to open or close. • Lack of help points. • Surfaces are uneven and paving is uniform with no contrast between the edge of a platform and platform concourse. • The internal design of the station is uniform with no tactile paving, lighting or selection of surfaces that cause glare. • Cycle parking and storage facilities for families who use tricycles, tandems, trailers and cargobikes and elderly cyclists who do not have the strength and dexterity to access two-tier parking stands or cycle ramps. • Lack of baby change facilities in male, female and accessible toilets to cater for all child care providers.
Pregnancy/maternity	Y	**During construction** The same considerations for those with a disability or age characteristic need to be observed. **Challenges for accessing or using the new station (not mentioned above):** • There is always a risk that unless the designs are reviewed in context by an appropriate organisation that we will inadvertently not deliver an inclusive design that would be supportive of women who are pregnant and cater for the needs of those with new born children. • Lack of a breast-feeding room/area for mothers who want privacy when breastfeeding. • Pregnant women may also feel vulnerable if the station is unstaffed.
Race	Y	**During consultation and construction:** • People whose first language is not English may not be able to read consultation information such as the publicity information and not have their voice heard. • People who do not speak or read English may experience difficulties understanding diversion signs if walking routes, cycling routes and bus stop locations are moved. **Challenges for accessing or using the new station (not mentioned above):** • Customer information boards and announcements are not suitable for passengers with limited English proficiency.

Protected Characteristic	Y/N	Explain the potential negative impact
Religion or belief	N	During construction noise, vibration and dust from construction worksites may cause disturbances to places of worship in the vicinity. Overall, it is not anticipated that people will be negatively impacted by the operational scheme as a result of their religion or beliefs.
Gender	Y	**Challenges during construction or for accessing or using the new station:** • There is always a risk that unless the designs are reviewed in context by an appropriate organisation that we will inadvertently not deliver an inclusive design that ensures that safety and security issues which tend to have a gender impact will be picked up. • Less natural surveillance, high hoardings and/or poor lighting during construction, in the station and potential isolated vulnerable areas may cause women to feel uncomfortable or unsafe. • Front-line healthcare staff who are predominantly women are expected to work a variety of shift patterns including days, nights, weekends and public/bank holidays to meet the needs of patients; construction works may have a greater impact on women than men in the area. • Male construction workers are more at risk of poor mental health than female workers. • Women may also feel vulnerable if the station is unstaffed.
Sexual orientation	Y	**Challenges during construction or for accessing or using the new station:** • Less natural surveillance, high hoardings and/or poor lighting during construction, in the station and potential isolated vulnerable areas may cause those who identify as lesbian, gay, bisexual, transgender, and queer (or questioning) to feel uncomfortable, unsafe or more at risk of being subject to a hate crime. For some LGBT people, hate crime is a particular concern, as are the difficulties experienced when reporting it. • There is always a risk that unless the designs are reviewed in context by an appropriate organisation that we will inadvertently not deliver an inclusive design that ensures that safety and security issues which tend to have an impact on those who identify as lesbian, gay, bisexual, transgender, and queer (or questioning) will be picked up. • Members of this group may also feel vulnerable if the station is unstaffed.
Marriage/Civil Partnership	N	It is not anticipated that people will be negatively impacted by the construction of the station or the final design as a result of their marital or civil partnership status.

Diversity Impact Assessment

Cambridge South Infrastructure Enhancements

Appendix A DIA Supporting Information

158454-NWR-00-ZZ-ASS-MPM-500004

Document to be read in conjunction with:

Cambridge South Infrastructure Enhancements Diversity Impact Assessment Document

158454-NWR-00-ZZ-ASS-MPM-500002

Step 2: The Evidence Base

Q3. Record here the data you have gathered about the diversity of the people potentially impacted by this work e.g. from the 2011 national census. You should also include any research on the issues affecting inclusion in relation to your work.

Consider evidence in relation to all the protected characteristics:

- Disability including Carers[1]
- Pregnancy/maternity
- Religion or belief
- Sexual orientation
- Age
- Race
- Gender
- Marriage/Civil Partnership

The main source of data used in the baseline profiling of the study area in South Cambridgeshire at this stage is Census 2011 data from the Office for National Statistics (ONS). There has been some change in the study area's demographics within the last 9 years, so profiling includes data from the Cambridge Southern Fringe survey [2]. This survey took place in 2018 and canvassed residents in the Clay Farm (Great Kneighton), Glebe Farm, Ninewells and Trumpington Meadows developments, located on the Cambridge Southern Fringe.

The data has revealed key statistics which it will be important to take into account of in all stages of the proposed development.

As of March 2011, the total population for South Cambridgeshire was 148,775.

Disability including Carers

Table 1 sets out the number of residents within South Cambridgeshire whose daily lives are impacted by a long-term health problem or disability that has lasted, or is expected to last, at least 12 months. This includes problems that are related to old age.

Table 1 Living with a long-term health problem or disability in South Cambridgeshire

Level of limitation/Age	South Cambridgeshire		South Cambridgeshire %		England %	
	Day-to-day activities limited a lot	Day-to-day activities limited a little	Day-to-day activities limited a lot	Day-to-day activities limited a little	Day-to-day activities limited a lot	Day-to-day activities limited a little
Age 0 to 15	299	532	0.20%	0.36%	0.29%	0.42%
Age 16 to 24	251	400	0.17%	0.27%	0.22%	0.36%
Age 25 to 34	291	544	0.20%	0.37%	0.33%	0.52%
Age 35 to 49	885	1,594	0.60%	1.09%	1.11%	1.42%
Age 50 to 64	1,372	2,900	0.93%	1.98%	1.91%	2.31%
Age 65 to 74	1,260	2,545	0.86%	1.73%	1.42%	1.93%
Age 75 to 84	1,771	2,690	1.21%	1.83%	1.58%	1.73%
Age 85 and over	1,522	1,058	1.04%	0.72%	1.00%	0.59%
Total	**7,651**	**12,263**			**4,098,808**	**4,838,146**

Source-ONS 2011 census

Nearly 20,000 people of all ages (13.5% of the population) are limited in their day-to-day activities due to either a health problem or a disability. Those aged over 50 make up 75% of this total. Those aged 85 or over in South Cambridgeshire are marginally more limited in their day-to-day activities compared to those in England as a whole.

[1] Including those with physical, mental and hidden impairments as well as **carers** who provide unpaid care for a friend or family member who due to illness, disability, or a mental health issue cannot cope without their support

[2] [2] https://cambridgeshireinsight.org.uk/wp-content/uploads/2019/07/Southern-Fringe-Survey-Report-FINAL.pdf

Table 2 provides information about the number of providers of unpaid care and the number of hours of care that they provide.

Table 2 Carers who provide unpaid care and number of hours

Carers/hours	South Cambridgeshire	South Cambridgeshire %	England %
Provides 1 to 19 hours unpaid care a week	11,138	7.49%	6.51%
Provides 20 to 49 hours unpaid care a week	1,409	0.95%	1.36%
Provides 50 or more hours unpaid care a week	2,444	1.64%	2.37%

Source-ONS 2011 census

There is a higher proportion of carers who provide up to 19 hours unpaid care a week in South Cambridgeshire than in England as a whole.

Given that the new station will serve patients attending hospitals on the Cambridge Biomedical Campus there is likely to be a higher number than usual of passengers with a long-term health problem or disability and those who are frail and vulnerable. Funding was announced in October 2020 for a new cancer hospital at Addenbrooke's so some patients may be passengers rather than make their journey by car.

Additionally, as Cambridge is Britain's everyday-cycling capital, research[3] also shows that most disabled cyclists use their cycle as a mobility aid and can't physically dismount and walk or wheel their cycle.

Different types of disabilities will also need to be considered as not all disabilities are physical or visible.

The likelihood of a location being used for suicide may be increased if there are facilities used by vulnerable persons in close proximity. Addenbrooke's Hospital has two psychiatric wards and a Liaison Psychiatry Service is provided on site. In 2017/2018 there were 117,074 A&E attendances[4].

Table 3 shows the number of suicides registrations in Cambridgeshire.

Table 3 Number of suicides registrations in Cambridgeshire

Area	Number of registered suicides	Cambridgeshire %
Cambridge	8	12.12%
East Cambridgeshire	7	10.61%
Fenland	14	21.21%
Huntingdonshire	20	30.30%
South Cambridgeshire	17	25.76%
Total	**66**	

Source-ONS 2018

In 2018 South Cambridgeshire had the second highest number of registered suicides in Cambridgeshire.

Age

Table 4 indicates the age of residents within South Cambridgeshire at the time of the 2011 census.

Table 4 Age of residents within South Cambridgeshire

[3] https://www.sustrans.org.uk/media/5949/bikelife19_greater-cambridge_web.pdf

[4] https://www.cuh.nhs.uk/about-us/our-profile/facts-and-figures

Age	South Cambridgeshire	South Cambridgeshire %	England %
Age 0 to 4	9,300	6.25%	6.26%
Age 5 to 7	5,483	3.69%	3.45%
Age 8 to 9	3,578	2.41%	2.16%
Age 10 to 14	9,106	6.12%	5.81%
Age 15	1,946	1.31%	1.23%
Age 16 to 17	3,789	2.55%	2.48%
Age 18 to 19	2,999	2.02%	2.59%
Age 20 to 24	7,148	4.81%	6.78%
Age 25 to 29	8,083	5.43%	6.89%
Age 30 to 44	31,957	21.48%	20.64%
Age 45 to 59	30,908	20.78%	19.39%
Age 60 to 64	9,756	6.56%	5.98%
Age 65 to 74	13,139	8.83%	8.59%
Age 75 to 84	8,166	5.49%	5.52%
Age 85 to 89	2,244	1.51%	1.46%
Age 90 and over	1,153	0.78%	0.76%
Total	**148,755**		**53,012,456**

Source-ONS 2011 census

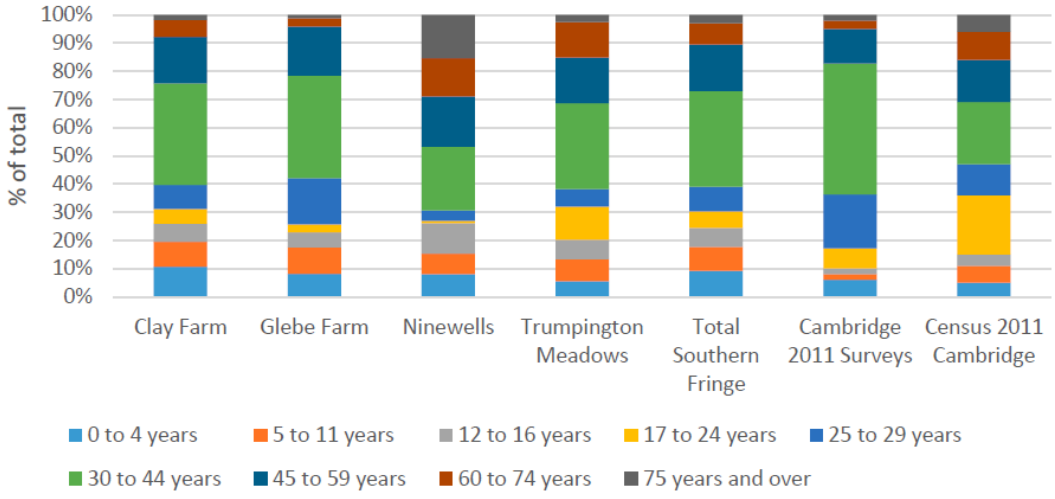
The elderly (defined as those over 60) total 34,458 and represent 23.2% of the population of South Cambridgeshire (slightly higher than the elderly total in England). Aging can affect all senses, but usually hearing and vision are most affected, so it is probable that this age group is more likely to develop dementia, have sensory impairments, have reduced mobility and use mobility aids such as sticks, walking frames, wheelchairs and mobility scooters.

The project should also take into account the distances that children under the age of 4 (9,300 or 6.3% of the population) are usually able to walk.

Cambridge Southern Fringe survey

The survey shows that the Southern Fringe developments have more children compared to both the 2011 Cambridge survey results and the Census 2011 data. For the Southern Fringe, 0-16-year olds make up almost one-quarter of the population, compared to 10% of the population in the 2011 surveys, and 15% of the population from Census 2011 (see Figure 1).

*Figure **Error! No text of specified style in document.**: Age structure of residents, Southern Fringe compared to 2011 surveys and 2011 Census*



Source - Cambridge Southern Fringe survey (May 2019)

Race

Table 5 indicates the ethnicity of residents within South Cambridgeshire at the time of the 2011 census.

Ethnicity	South Cambridgeshire	South Cambridgeshire %	England %
White	**138,787**	**93.30%**	**85.42%**
English/Welsh/Scottish/Northern Irish/British	129,812	87.27%	79.75%
Irish	1,094	0.74%	0.98%
Gypsy or Irish Traveller	485	0.33%	0.10%
Other White	7,396	4.97%	4.58%
Mixed/multiple ethnic groups	**2,524**	**1.70%**	**2.25%**
White and Black Caribbean	552	0.37%	0.78%
White and Black African	270	0.18%	0.30%
White and Asian	991	0.67%	0.63%
Other Mixed	711	0.48%	0.53%
Asian/Asian British	**5,540**	**3.72%**	**7.82%**
Indian	2,210	1.49%	2.63%
Pakistani	465	0.31%	2.10%
Bangladeshi	217	0.15%	0.82%
Chinese	1,189	0.80%	0.72%
Other Asian	1,459	0.98%	1.55%
Black/African/Caribbean/Black British	**1,268**	**0.85%**	**3.48%**
African	760	0.51%	1.84%
Caribbean	341	0.23%	1.11%
Other Black	167	0.11%	0.52%
Other ethnic group	**636**	**0.43%**	**1.03%**
Arab	253	0.17%	0.42%
Any other ethnic group	383	0.26%	0.62%
Total	**148,755**		**53,012,456**

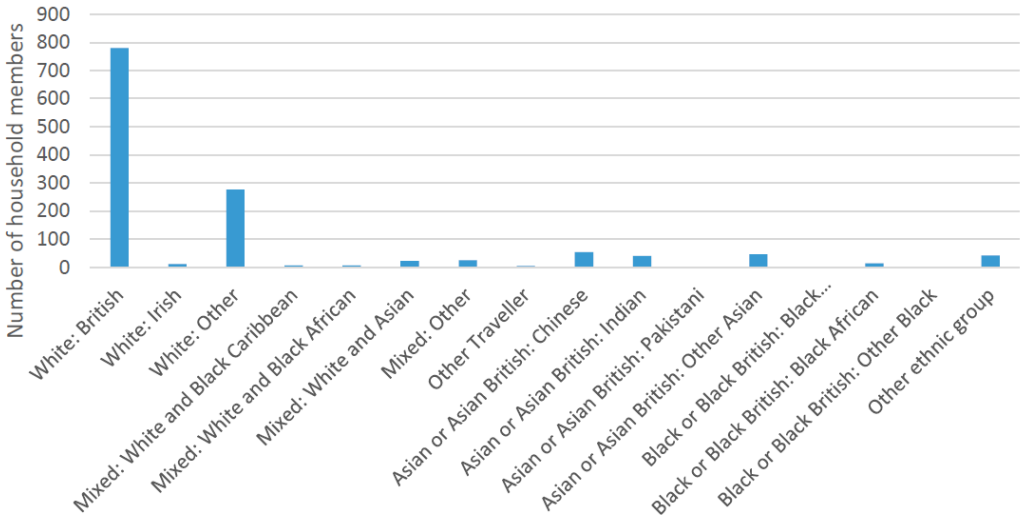
Source-ONS 2011 census

From the data above, South Cambridgeshire is identified as having a higher percentage of white residents and lower percentages of other ethnic groups compared to the rest of England.

Southern Fringe development survey

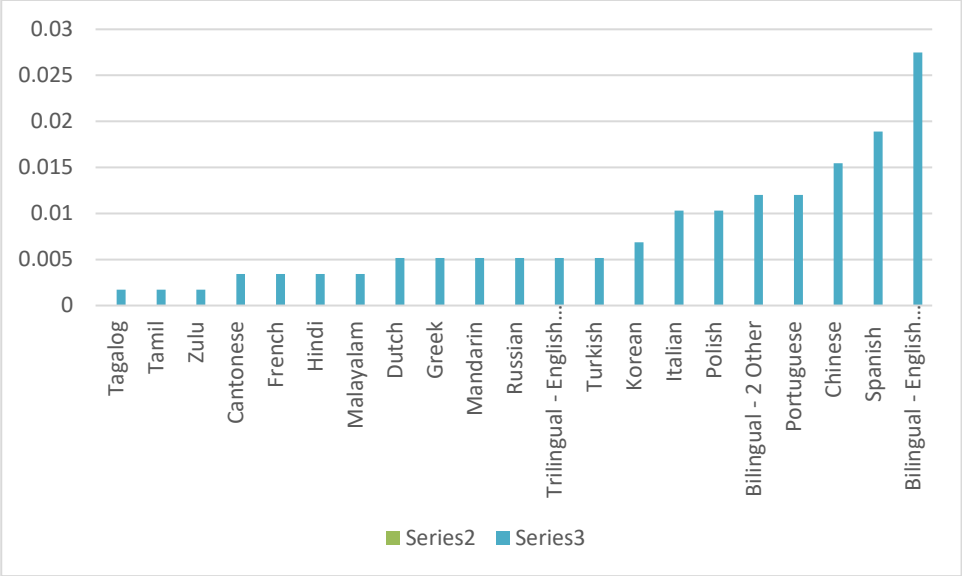
Figure 2 shows the ethnicity of residents who responded to the survey: 58% are White British, White Other the second largest ethnic group (21%), followed by Chinese and Asian Other (4%) and Indian (3%).

Figure 2 Ethnicity of residents in the Southern Fringe



Source - Cambridge Southern Fringe survey (May 2019)

The survey also shows that 48 different languages are spoken with English the first language for 77% of residents who responded. Figure 3 also highlights the diversity of languages (top 20) spoken within the Cambridge Southern Fringe developments.



Gender

Table 6 indicates the gender of residents within South Cambridgeshire at the time of the 2011 census.

Gender	South Cambridgeshire	South Cambridgeshire %	England %
Males	73,790	49.61%	49.18%
Females	74,965	50.39%	50.82%
Total	**148,755**		**53,012,456**

Source-ONS 2011 census

South Cambridgeshire is in line with the national ratio of more females to males in the population, with a slightly higher proportion of males and a slightly smaller proportion of females than in England as a whole.

A total of 35,000 staff travel to work or study on the CBC. Cambridge University Health NHS Trust employed 9,839 staff in 2017/2018[5], of which 74% were female and 26% were male. Front-line healthcare staff are expected to work a variety of shift patterns including days, nights, weekends and public/bank holidays to meet the needs of patients.

Religion

Table 7 indicates the religion of residents within South Cambridgeshire at the time of the 2011 census.

Religion	South Cambridgeshire	South Cambridgeshire %	England %
Has religion	**91,866**	**61.76%**	**68.09%**
Christian	87,463	58.80%	59.38%
Buddhist	700	0.47%	0.45%
Hindu	1,123	0.75%	1.52%
Jewish	362	0.24%	0.49%
Muslim	1,464	0.98%	5.02%
Sikh	186	0.13%	0.79%
Other religion	568	0.38%	0.43%
No religion	**44,741**	**30.08%**	**24.74%**
Religion not stated	**12,148**	**8.17%**	**7.18%**
Total	**148,755**		**53,012,456**

Source-ONS 2011 census

61.76% of people in South Cambridgeshire class themselves as religious; this is significantly less compared with England as a whole. Christianity is the most prevalent religion at 58.8%, followed by 0.98% of the population identifying as Muslim.

Pregnancy/maternity

Table 8 indicates the number of live births and the general fertility rate of the residents within South Cambridgeshire in 2018.

Live births/ General Fertility Rate*	South Cambridgeshire	England
Live births	1,647	625,651
General Fertility Rate	61.2	59.2

Source-ONS 2018

* General fertility rate: number of live births per 1,000 women aged 15-44 per year, calculated using mid-year population estimates.

There are 2 more live births per 1,000 women aged 15-44 per year compared to England as a whole.

Given that the new station will serve patients attending the Rosie maternity hospital on the Cambridge Biomedical Campus there is likely be a higher number than usual of pregnant women using the station. In addition, funding for a new Children's hospital was announced in September 2020.

[5] https://www.cuh.nhs.uk/about-us/our-profile/facts-and-figures

Marriage/Civil Partnership

Table 9 indicates the marital status of residents in South Cambridgeshire aged 16 and over.

Marital status	South Cambridgeshire	South Cambridgeshire %	England %
Single (never married or never registered a same-sex civil partnership)	33,110	27.74%	34.64%
Married	66,819	55.99%	46.59%
In a registered same-sex civil partnership	277	0.23%	0.23%
Separated (but still legally married or still legally in a same-sex civil partnership)	2,594	2.17%	2.65%
Divorced or formerly in a same-sex civil partnership which is now legally dissolved	9,278	7.77%	8.97%
Widowed or surviving partner from a same-sex civil partnership	7,264	6.09%	6.91%
Single (never married or never registered a same-sex civil partnership)	33,110	27.74%	34.64%
Total	**119,342**		**42,989,620**

Source-ONS 2011 census

From the data above, South Cambridgeshire is identified as having a higher percentage of married residents compared to England as a whole.

Sexual orientation

No questions were included in the 2011 census on sexual orientation. Whilst there are experimental statistics on sexual orientation in the UK in 2018 by region, sex, age, marital status, ethnicity and socio-economic classification there is a lack of local statistics for South Cambridgeshire. However, based on responses to surveys between 2013 and 2015, the research by ONS found that 1.8 per cent of the Cambridgeshire population identified themselves as gay or lesbian – see Table 10.

	Estimate %	Upper %	Lower %
Inner London	3.1	3.5	2.7
Cambridgeshire	1.8	2.8	0.8
Greater Manchester	1.7	2	1.4
Devon	1.3	1.9	0.7
West Yorkshire	1.1	1.4	0.8
Lancashire	1.1	1.7	0.5
East Sussex	1.1	1.7	0.5
Dorset	1.1	2	0.2
Tyne and Wear	1	1.3	0.7
South Yorkshire	1	1.4	0.6
Outer London	1	1.2	0.8
Derbyshire	1	1.6	0.4
West Midlands	0.9	1.2	0.6
Somerset	0.9	1.4	0.4
Norfolk	0.9	1.4	0.4
Merseyside	0.9	1.2	0.6
Nottinghamshire	0.8	1.3	0.3

	Estimate %	**Upper %**	**Lower %**
Kent	0.8	1.2	0.4
Hertfordshire	0.8	1.2	0.4
Hampshire	0.8	1.2	0.4
Surrey	0.7	1.1	0.3
Oxfordshire	0.7	1.2	0.2
Leicestershire	0.7	1.2	0.2
Gloucestershire	0.7	1.3	0.1
Warwickshire	0.6	1.1	0.1
Essex	0.6	1	0.2
Worcestershire	0.5	1	0
West Sussex	0.5	0.8	0.2
Staffordshire	0.4	0.7	0.1
Northamptonshire	0.4	0.7	0.1
North Yorkshire	0.4	0.7	0.1

Source-ONS 2017, Subnational sexual identity estimates

From the data above, Cambridgeshire is identified as having one of the highest gay and lesbian populations in the country.

Step 3: Impact

Q5b. Explain the potential negative impact. Please state the characteristic and give an explanation

Protected Characteristic	Y/N	Explain the potential negative impact

Those with a disability or long-term health problem	Y	**During consultation and construction of the station:**
		• People who are visually impaired, have learning difficulties or have other print impairments such as dyslexia, may not be able to participate in the consultation and their views are not expressed.
		• Likely to be periods of greater traffic flow featuring heavy goods vehicles on roads without controlled crossings – these could cause concerns about safety for those with mobility, sensory and/or cognitive impairments and their carers.
		• Any temporary diversions for vehicles, cyclists and pedestrians may impact negatively on disabled people who may be less able to walk or cycle in difficult conditions or longer distances. This may also affect those with visual or cognitive impairments who may experience difficulties navigating new routes and locating bus stops.
		• Older people, those who have sensory impairments, dementia and those with cognitive impairments (such as Autism Spectrum Disorder) may become confused with temporary site logistics and how this affects their movement patterns around the site
		• Uneven or steep pavements could force those who have reduced mobility or have reduced poor health to venture into the road, either because the pavement is too hazardous or because crossing the uneven ground would require too much energy.
		• Temporary signs could pose a hazard:
		  ○ Excessive signage could be difficult for those who use mobility aids or have reduced mobility to navigate.
		  ○ The backs of the signs used on most construction sites are grey; these can be difficult for those with visual impairments to distinguish between the sign and the pavement.
		• Noise, dust and vibration from construction could impact those with hearing impairments, those with visual impairments who rely on their other senses to navigate and people with respiratory problems.
		• The presence of a construction compound itself with perceived access to stretches of high-speed rail track could pose an attractive means of suicide to vulnerable individuals.
		
		Challenges for accessing or using the new station:
		• There is always a risk that without the engagement with those with a disability or long-term health problem and unless the application of access standards in the designs are reviewed in context by an appropriate organisation (BEAP) that we will inadvertently not deliver a design that is not inclusive or includes appropriate suicide prevention measures.
		• Getting to the station: number of available parking bays for Blue Badge holders, proximity of parking to the station; closeness to the entrance or platform; steps and other objects to navigate (e.g. litter bins); cost of parking; the length of the permitted stay; poorly situated drop off points, lack of seating on forecourt, lack of help points and a crowded station forecourt.

Protected Characteristic	Y/N	Explain the potential negative impact
		• Lack of accessible public transport to get to the station. • Those with a disability or long-term health problem may be concerned about their security if the station is unstaffed. • Problems with ticketing: using ticket vending machines (e.g. machines not being appropriate for all passengers, including wheelchair users, those with dexterity disabilities, dyslexia, learning disabilities and vision disabilities), ticket office counter not being at a height suitable for wheelchair users; a lack of space or a shelf for luggage or mobility assistance; the presence of security screens can be a sound barrier for passengers who have a hearing impairment; lack of a ticket office or it is not always open, and the range of ticket choices is confusing and complicated. • Difficulty in negotiating the gap between the train and the platform, both physically and mentally as the "gap" can be seen as a potentially anxiety-inducing situation. • Lack of awareness of 'Passenger Assist' or problems with a booking. • Difficulty in finding exits and onward travel information, signs and instructions being difficult to follow. • Customer information boards and announcements are not suitable for some passengers with sensory impairments; display boards can be too small, announcements can lack clarity or be difficult to hear alongside the high levels of background noise in stations. • Lifts are too small for users of wheelchairs or mobility scooters. • Lack of lifts and ramps; particularly when these are out of order or in locations which are nonsensical. • Lack of adequate provision for those with reduced mobility to evacuate from platforms – 'refuge points' on the platform do not offer an equal opportunity for these users to get off the platforms themselves which able bodied persons can do. • Lack of accessible toilets and, for those who are not able to use the toilet independently, a Changing Places toilet. • Insufficient seats in the waiting room, on platforms and the concourse; no spaces for wheelchair users to sit alongside a carer or companion; and seating is not allocated or clearly marked. Those with conditions such as multiple sclerosis, Parkinson's, lung disease or heart conditions may struggle on their feet and need plenty of places to pause. • Stairs do not a landing to allow those who need time to pause and treads on stairs are a uniform colour, so no colour contrast for those with visual impairments. • Signage is not clearly marked, particularly for step free access or those with cognitive impairments. • Lack of leaning points or handrails or a landing to rest if negotiating the steps. • Doors are too heavy to open or close and are too narrow. • Surfaces are uneven and paving is uniform with no contrast between the edge of a platform and platform concourse. • The internal design of the station is uniform with no tactile paving, lighting or selection of surfaces that cause glare. • Many disabled people use handcycles, recumbents and trikes, which are typically longer and wider than standard two-wheeled bicycles; this group may experience challenges with cycle parking and storage facilities. • Fast non-stopping platforms can be a target for suicidal individuals as there is a greater opportunity available for the act to be completed.

Protected Characteristic	Y/N	Explain the potential negative impact
		• There is poor lighting and potential vulnerable points of access to the network or places where at risk people might hide prior to making a suicide attempt. • There are dark and isolated areas which encourage the opportunity for trespass activity off the platform as well as criminal and anti-social activity.
Age	Y	**During consultation or construction** • Older people may not be able to access information about the project via the internet, whether during consultation stages or whilst the station is being constructed. • Likely to be periods of greater traffic flow featuring heavy goods vehicles on roads without controlled crossings – these could cause concerns about safety for children and their parents, older people, and students on their way to nearby primary and secondary schools. • Longer or unfamiliar walking diversions around construction areas could impact those who are elderly or those with young children or with pushchairs. • Older people may also experience difficulties reading signage and navigating new routes, especially in dark conditions • Road and footpath closures and diversions could impact those who are elderly or those with young children or with pushchairs. • Uneven or steep pavements could force those who are elderly or those with young children or with pushchairs to venture into the road, either because the pavement is too hazardous or because crossing the uneven ground would require too much energy. • Temporary signs could pose a hazard. Excessive signage could be difficult for those who are elderly or those with young children or with pushchairs to navigate. • Noise, dust and vibration from construction could impact those who are elderly or those with young children or with pushchairs, particularly those who use Hobson's Park as a recreational amenity. • Deliveries of construction materials on local roads could impact children on their journey to school. **Challenges for accessing or using the new station:** • There is always a risk that without the engagement with older people and unless the application of access standards in the designs are reviewed in context by an appropriate organisation (BEAP) that we will inadvertently not deliver an inclusive design. • Older people may be concerned about their security if the station is unstaffed. • Getting to the station: poorly situated drop off points and the length of the permitted stay; steps and other objects to navigate; and crowded station forecourt. • Lack of accessible public transport to get to the station.

Protected Characteristic	Y/N	Explain the potential negative impact
		• Problems with ticketing: using ticket vending machines (e.g. machines not being appropriate for all passengers); lack of a ticket office or it not always being open; signs too small, and the range of ticket choices is confusing and complicated. • Difficulty in negotiating the gap between the train and the platform, both physically and mentally as the "gap" can be seen as a potentially anxiety-inducing situation for those feel frail or vulnerable. • Lack of awareness of 'Passenger Assist' or problems with a booking. • Difficulty in finding exits and onward travel information, signs and instructions being difficult to follow. • Customer information boards and announcements are not suitable for some passengers with sensory impairments; display boards can be too small, announcements can lack clarity or be difficult to hear alongside the high levels of background noise in stations. • Lack of lifts and ramps; particularly when these are out of order or in locations which are nonsensical. • Insufficient seats in the waiting room, on platforms and the concourse, and seating is not allocated or clearly marked. • Lack of leaning points or handrails. • Building doors are too heavy to open or close. • Lack of help points. • Surfaces are uneven and paving is uniform with no contrast between the edge of a platform and platform concourse. • The internal design of the station is uniform with no tactile paving, lighting or selection of surfaces that cause glare. • Cycle parking and storage facilities for families who use tricycles, tandems, trailers and cargobikes and elderly cyclists who do not have the strength and dexterity to access two-tier parking stands or cycle ramps. • Lack of baby change facilities in male, female and accessible toilets to cater for all child care providers.
Pregnancy/maternity	Y	**During construction** The same considerations for those with a disability or age characteristic need to be observed. **Challenges for accessing or using the new station (not mentioned above):** • There is always a risk that unless the designs are reviewed in context by an appropriate organisation that we will inadvertently not deliver an inclusive design that would be supportive of women who are pregnant and cater for the needs of those with new born children. • Lack of a breast-feeding room/area for mothers who want privacy when breastfeeding. • Pregnant women may also feel vulnerable if the station is unstaffed.
Race	Y	**During consultation and construction:** • People whose first language is not English may not be able to read consultation information such as the publicity information and not have their voice heard.

Protected Characteristic	Y/N	Explain the potential negative impact
		• People who do not speak or read English may experience difficulties understanding diversion signs if walking routes, cycling routes and bus stop locations are moved. **Challenges for accessing or using the new station (not mentioned above):** • Customer information boards and announcements are not suitable for passengers with limited English proficiency.
Religion or belief	N	During construction noise, vibration and dust from construction worksites may cause disturbances to places of worship in the vicinity. Overall, it is not anticipated that people will be negatively impacted by the operational scheme as a result of their religion or beliefs.
Gender	Y	**Challenges during construction or for accessing or using the new station:** • There is always a risk that unless the designs are reviewed in context by an appropriate organisation that we will inadvertently not deliver an inclusive design that ensures that safety and security issues which tend to have a gender impact will be picked up. • Less natural surveillance, high hoardings and/or poor lighting during construction, in the station and potential isolated vulnerable areas may cause women to feel uncomfortable or unsafe. • Front-line healthcare staff who are predominantly women are expected to work a variety of shift patterns including days, nights, weekends and public/bank holidays to meet the needs of patients; construction works may have a greater impact on women than men in the area. • Male construction workers are more at risk of poor mental health than female workers. • Women may also feel vulnerable if the station is unstaffed.
Sexual orientation	Y	**Challenges during construction or for accessing or using the new station:** • Less natural surveillance, high hoardings and/or poor lighting during construction, in the station and potential isolated vulnerable areas may cause those who identify as lesbian, gay, bisexual, transgender, and queer (or questioning) to feel uncomfortable, unsafe or more at risk of being subject to a hate crime. For some LGBT people, hate crime is a particular concern, as are the difficulties experienced when reporting it. • There is always a risk that unless the designs are reviewed in context by an appropriate organisation that we will inadvertently not deliver an inclusive design that ensures that safety and security issues which tend to have an impact on those who identify as lesbian, gay, bisexual, transgender, and queer (or questioning) will be picked up. • Members of this group may also feel vulnerable if the station is unstaffed.

Protected Characteristic	Y/N	Explain the potential negative impact
Marriage/Civil Partnership	N	It is not anticipated that people will be negatively impacted by the construction of the station or the final design as a result of their marital or civil partnership status.