Wareham Ramps - Equalities Impact Assessment	
Applicant details	
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Directorate	Environment
Strategy Details	
Title of strategy, policy, project or service.	Wareham Ramps
Type of strategy	New or proposed
If other type of strategy	
Officers involved	Michael O'Gorman John Burridge
What is the aim of the strategy, policy, project or service?	1.To determine if step free access is required over or under the railway line in Wareham, in response to the closure of the existing level crossing. 2.If a solution is required, to design, construct and maintain pedestrian step-free access over/under the railway line.
Information gathered.	
What, data, information, evidence, research was used in this EqIA and how has it been used to inform the decision making process?	At present the level crossing in Wareham is the only location in the town where step free access is provided over/under the railway line. The line divides residential areas in the north from key services and the town centre in the south. Following the closure of the level crossing the remaining crossings over the railway line will be the footbridge at the train station (accessed by stairs only) and the A351 road fly over (carriageway only, no footway). The decision making process for this project, outlined numerically below, has commenced from the stage post closure of the current railway level crossing. 1.Does a step free access need to be provided to travel over/under the railway line? Specific user groups of public footpaths and rights of way require step free access in order to access bridge crossings, use subways or overcome significant changes in the height of land. Some of the user groups that require step free access can be attributed to the following protected characteristics, as defined by the Equality Act 2010: • Disability: The Government report, “Inclusive Mobility” defines several different disability groups that find the use of stairs difficult or cannot use them at all. In particular those with a locomotive issue , such as mobility scooter users, cannot use stairs • Age: Age Concern UK and the NHS highlight the stairs as a major hazard that increase the risk of falls by elderly people. Removal of step free access will increase the risk of a fall for an elderly user. Also, some elderly are unable to use stairs due to a health condition or associated disability. • Pregnancy and maternity: Those using a pushchair for young children require step free access. Stairs introduce the requirement to lift a pushchair. • Religious: The three aforementioned protected characteristics may also access a place of worship via step-free routes. It is clear that the closure of the existing level crossing will have a negative impact on users,

attributed to a protected characteristic, who require step free access. They will be unable to use the pedestrianised network and would have to rely on using a private vehicle or public transport to travel. It is therefore deemed necessary that a new form of step free access is designed and constructed.

2.What step free access solutions exist and which is appropriate for Wareham?

In selecting an appropriate step free solution for Wareham three standard design solutions exist. These are lifts or ramps that would connect to the existing footbridge, or a subway below the railway line. Lifts and subways have both been discounted in the decision making process based on technical and financial reasoning. Further information on this reasoning is available on request.

The preferred solution for engineering and financial reasoning is the installation of ramps connecting to the existing railway bridge at the train station. Ramps are a common form of step free access in the built environment. Two recent installation examples of access ramp installation are Kennett Railway Station Bridge in Suffolk (constructed 2016), and the Perryn Road Footbridge over the A40, London (constructed 2009).

Several standards and guidelines identify that ramps are an acceptable solution for users who require step free access. The two documents relevant to designing ramps as part of transport infrastructure are the Design Manual for Roads and Bridges (DMRB) and the Department for Transport (DFT) guidance report, “inclusive mobility”.

3. What considerations need to be made when designing access ramp?

The slope of a ramp, also known as gradient, is the most important design consideration for users. Certain users attributed to a protected characteristic may encounter difficulty if the steepness of a ramp is to great. However, the steepness of a ramp is dictated by the available footprint for construction.

The DMRB states that the maximum slope a ramp can be installed at is 1:12, with landings of 2.0m with a maximum individual rise of 650mm. However, the DMRB does state that a 1:20 gradient ramp is more desirable for users. The reason for this desirability is not stated by the standard.

The DFT “inclusive mobility “guide recommends a ramp gradient of 1:20, stating that this can be used by manual wheelchair users. It also states a 1:12 ramp solution is acceptable, however recommends a maximum rise of 166mm before landings. This is based on ensuring that the ramps are accessible by manual wheelchair users without assistance. .

“Inclusive Mobility” further states that more research is required in order to analyse ramp gradient versus ramp length, questioning if a shorter ramp at steeper gradient could be more user-friendly than a much longer ramp at a shallow gradient. It recommends from research provided by others that a maximum ramp length of 50m should not be exceeded. On this basis a 1:12 solution would be preferred to a 1:20 design solution for any height gain exceeding four metres.

Although a 1:20 gradient ramp is more desirable for specific user groups, the availability of footprint at Wareham Station is constrained by several factors. Therefore a 1:12 access ramp solution is the most practical option.

In conclusion there is not a defining standard that can be adopted for the design of a ramp solution at Wareham Railway Station. Design of a 1:12 solution at this location would not be sub-standard, however would not meet the best practice outlined by current guidance.

4. Further consideration of the suitability of a 1:12 Ramp Structure

As current standard and guidance permits the use of 1:12 gradient ramp, however does not recommend the gradient as best practice, the use of existing 1:12 ramp structures was analysed further.

Between Burton and Christchurch a DCC designed, constructed and maintained footbridge over sails the A35 Highway. Step free access to the bridge is provided by ramps with a 1:12 gradient. To date DCC has received no complaints regarding the ramps being discriminatory towards users attributed to a protected characteristic. To validate this finding, video recording was set-up on the ramps (January 2016) to record if any user of the ramp could be attributed to a defined protected characteristics . The evidence showed that the ramp was used by pushchairs (maternity and pregnancy), a mobility scooter (disability) and the elderly (age). Although not conclusive, the recorded evidence supports the decision that a 1:12 ramp solution is acceptable for some users attributed to a protected characteristic.

A further example of a 1:12 ramp in operation is located in Weymouth. This forms part of the public highway and to date has no complaints about it being discriminatory towards protected characteristics. No video recording has been completed at this location.

	Nationally the Perryn Road Footbridge over the A40 in London was constructed with 1:12 access ramps. This was commissioned by Transport for London and the project quotes as meeting European Accessibility Standards. In conclusion, present examples of 1:12 ramps in operation show that they can provide suitable step free access for protected characteristics. However, the evidence is not conclusive as not all of the disability groups who require step free access have been accounted for . 5. Overall Conclusion The closure of the level crossing at Wareham train station will have a negative impact on users attributed to a protected characteristic who require step free access in order to travel by foot or locomotive assistance. To reduce the impact of the closure it is recommended that a new form of step free access is installed. The most suitable form of access is ramps linking the highway to the existing footbridge at Wareham Railway Station. Due to space constraints at the station, the solution will require ramps to be installed at a 1:12 gradient. This gradient of ramp has been used both locally and nationally and has been shown to be suitable for users attributed to the pregnancy and maternity protected characteristic. For the protected characteristic age it is unclear if a 1:12 ramp is suitable for all but there is evidence to suggest it is a suitable solution for the able elderly. For the protected characteristic disability standards show that unassisted manual wheelchair users may find a 1:12 ramp challenging. For other locomotive assistance, such as mobility scooters, a 1:12 ramp will is a suitable form of step free access.
What data do you already have about your service users, or the people your proposal will have an impact on?	Data for users of the existing level crossing has been collected through two surveys in July 2016. These surveys categorised users based on their reason for using the level crossing instead of the adjacent stairs and footbridge. Based on the response to the survey questioning a proportion of the users can be attributed to protected characteristics as follows: • Age: Twenty one users (3.6% of total count) completing the questionnaire identified the reason for not using stairs was because they were elderly. • Pregnancy and maternity: Twenty eight users (4.6% of total count) completing the questionnaire identified the reason for not using the stairs because they were using a pushchair. It is reasonable to conclude, based on evidence discussed in the previous section, that a 1:12 ramp is a suitable step free access solution for users attributed to the pregnancy and maternity protected characteristic. • Disability: Sixty users (9.8% of total count) completing the questionnaire identified the reason for not using the crossing was due to mobility or health issues. Survey results attributed to the protected characteristic disability can be broken down into more specific defined groups. As per part one of this EqIA, this is required because the impact of access ramps will be different for sub groups of the disability protected characteristic. Of the users surveyed fourteen identified as mobility scooter users, thirty one identified as having undefined mobility issues, twelve identified as having health issues or an injury and five were wheel chair users. All wheelchair users were either assisted or using an electric mobility device. For all users apart from those with undefined mobility/health issues, evidence supports the 1:12 ramps providing a suitable form of access. For other users attributed to disability, route analysis was completed to identify where users were travelling to and from. Nineteen of those who identify as having a mobility issue were travelling to or from Wareham Town Centre back to a home address north of the railway line. In order to complete this journey, the user would have to travel along North Street, where the existing footpath gradient for over thirty metres is 1:12. As this similar gradient already exists on the users journey, the introduction of a 1:12 ramp would be similar to what the user already experiences. For the twelve users with a mobility issue not travelling to the town centre from a north Wareham address, journeys completed are random and no further patterns can be identified. It is reasonable to assume that a 1:12 ramp solution is suitable for some of these users, however it cannot be concluded that it will be suitable for all. For the age protected characteristic, a similar analysis was completed to assess where users were travelling to and from. Of the twenty one users, fifteen were travelling to or from a home address in the North of Wareham to or from the town centre. Again, it is reasonable to assume for that these users the introduction of a 1 in 12 ramp solution is similar to the gradient managed on North Street. For the six elderly users not completing this journey, it is unknown as to whether a 1:12 ramp solution is acceptable. Of all the 109 users of the crossing who can be attributed to a protected characteristic, nineteen identified themselves as rail passengers. A further breakdown of this figure shows that seven of the nineteen users would find a 1:12 ramp solution acceptable. The acceptability of the solution for

	the other twelve users is not conclusive as the reason for not using the ramp is broadly defined as a mobility issue or elderly. In conclusion the survey and further research on the potential users has shown that 109 users of the existing level crossing can be attributed to a protected characteristic. Of these users evidence and research has shown that a 1:12 ramp provides a suitable form of step free access for seventy four users. For the other thirty five users it is unknown if a 1:12 ramp will provide a suitable form of step free access.
What engagement or consultation has taken place as part of this EqIA?	Statistics provided by the survey data show that 76% of users of the crossing live north of the railway line. On this basis it is important that engagement and consultation, if required, focuses on users living in this area. To confirm the residential areas north of the railway line are representative of users of the level crossing DCC's research team completed a study on the local population. This has shown that approximately 7% of the population identify are limited a lot by a long term illness/disability, which closely aligns with users of the crossing who identified as having a disability. The report also shows that over 27% of the population in the area are over sixty five. This figure is significantly higher than those who identified as elderly as part of the survey. This would imply that not all elderly users of the crossing would require step free access, and therefore ramps would not have a negative impact on the age characteristic as a whole. At present there is no further plan to complete EqIA engagement or consultation prior to commencement of the planning application process. As part of this process an open exhibition will be held prior to formal submission of the application. At this exhibition there will be an aim to capture as many views as possible regarding the suitability of 1:12 ramps for users attributed to a protected characteristic.
Is further information needed to help inform this proposal?	At present it has been decided that the information provided is sufficient to determine the impact of the proposed project on identified protected characteristics.
How will the outcome of consultation will be fed back to those who you consulted with.	The information gathered from surveys and literature research will be presented at an open exhibition in Wareham. Results of consultation will be fed back to users via the planning application process.
Who does the service, strategy, policy, project or change impact?	
Age	
Age impact	Positive
Further details of the age impact	The introduction of 1:12 access ramps will provide a suitable form of step free access over the railway line for most elderly who are unable to use stairs. This is supported by evidence gathering on existing ramp examples and route analysis of users of the existing level crossing. The scheme will allow the majority of users attributed to this characteristic to cross the railway line, and travelling to different locations in Wareham, by foot. This will encourage these users to lead a healthy independent lifestyle having an overall positive impact on the protected characteristic.
Disability	
Disability	Positive
Further details of the disability impact	The introduction of 1:12 ramps will mainly have a positive impact on the users attributed to this protected characteristic. The impact on users with a locomotive disability will be dependent on how they travel. For those using mobility scooters, electric wheelchairs and assisted manual wheelchairs evidence gathering has shown that the ramps will be suitable form of step free access. This will allow these users to cross the railway line without the need for vehicle transport, promoting an independent healthy lifestyle. For manual wheelchair users who travel without assistance, it is unknown if the ramps will provide a suitable form of step free access. Evidence and literature reviewed is inconclusive.

	Although other disability groups were not considered during evidence gathering it is seen that the ramps will provide a safe form of step free access over the railway line.
Gender impact	
Gender impact	Neutral
Pregnancy and maternity	
Pregnancy and maternity	Positive
Further details of the pregnancy and maternity impact	Evidence gathering has shown that users attributed to this characteristic, in particular using pushchairs, should find a 1:12 ramp a suitable form of step free access to cross over the railway line. Overall the impact of the solution will be positive for this user group.
Race and ethnicity	
Race and ethnicity	Neutral
Religion or belief	
Religion or belief	Neutral
Sex	
Sex	Neutral
Sexual orientation	
Sexual orientation	Neutral
Other socially excluded groups	
Other socially excluded groups	Neutral