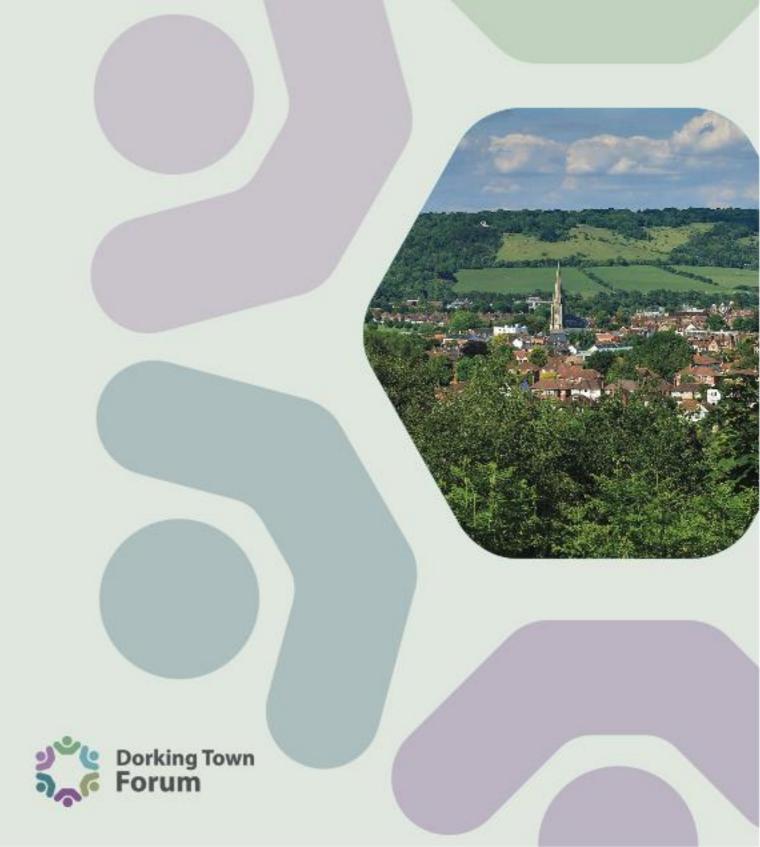
Dorking Deepdene Station – Access for All Funding Application

John Meudell Chris Heaps November 2018



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Dorking Town Forum (DTF) November 16th 2018

Dorking Town Forum recognize the need for improvements to access at Deepdene and are generally supportive of an Access-for-All (AfA) application.

As it currently stands access to platforms at this station is limited to long, narrow steep stairs (of around 40 treads each) making the station inaccessible to all but the young and/or physically able (see photos).

As such we feel the difficulties faced by passengers generally, not merely the disabled, puts off many potential passengers to destinations within and beyond the region and warrants consideration for access improvement funding.

Notwithstanding this AfA submission, that potential, and the safety and access capacity required to accommodate enhanced accessibility and growth in passenger numbers, warrants a deeper consideration of the current station facilities, which are aging and in poor condition.

With regard to specific criteria set out in the nomination invitation letter, we submit:

Footfall

Deepdene has a footfall of approximately 600,000 passengers per annum (DfT data), usage that has remained relatively stable since 2008. Of these approximately 400,000 are journeys to and from the local area and 200,000 are interchanges. The North Downs Line (NDL) provides regular and efficient access not only to Gatwick Airport, Gatwick Airport economic development area and South Coast destinations accessed from there, but also to regional hubs of Guildford and Reading, from where are regular direct connections to the West Country, Bristol and South Wales, and to Oxford, the Midlands and the North West. In addition to servicing significant employment locations there are numerous large educational establishments along the North Downs Line, including two universities.

Deepdene station is inaccessible to the elderly, infirm, parents with small children and buggies, passengers with heavy baggage or leisure equipment and passengers with any sort of physical disability. This not only significantly limits growth of local usage but also use by passengers travelling to Gatwick Airport and the Gatwick development area from the Dorking and SW London areas for work or air travel.

Removal of the access barrier creates scope to significantly increase local and interchange footfall and associated fare revenues without incurring additional operational costs (through utilizing existing spare capacity on lines into Dorking).

Particular Local Circumstances

Dorking does not feature any facilities or centres specifically for the disabled and, demographically, is average in terms of their presence in the local population.

That being said, the high number of residential and retirement homes that have been built, and continue to be built, in the area, adds to the generally ageing population in Dorking. Combined with the reliance of elderly retirees on public transport, the poor access at Deepdene considerably restricts the mobility of a significant element of the local population.

ORR figures also show Deepdene has a particularly high number of interchange passengers relative to journeys beginning and ending in Dorking. It has one of the highest ratios of interchange to local entries/exits of any group station in the UK.

Analysis of routes served by Deepdene and Dorking Main suggest that the majority of these would be interchanging to destinations east of Deepdene, i.e. Reigate/Redhill and the Gatwick development area and beyond, from locations to the north of the district and along the SW London direct rail routes to Dorking from Waterloo and Victoria stations. Passengers from those areas wanting destinations to the west are already served by twice hourly direct services to Guildford via Leatherhead supporting the conclusion that most interchanges are from north to east and vice versa.

Both Deepdene and Dorking Main serve as local hubs, with local bus services serving the town and rural areas surrounding Dorking. Recently installed electronic transport information systems provides a base on which to further enhance bus connections, demonstrating the importance of such interchange traffic to the two rail companies operating the stations and the rural hinterland the station serves.

Third Party Funding

We suggest that the importance to Gatwick Airport of reducing its carbon footprint and congestion caused by surface transport might well make improvements at Dorking an attractive project, both to Central Government and for the promoters of the airport and associated development area.

With potential to support increases in movement by rail and economic development within and beyond the South East the project would be a prime target for regional development funding. Likewise, the age and poor condition of the structures at Deepdene would make the station a candidate for rail infrastructure replacement/improvement funding.

Given the financial situations of both Surrey and Mole Valley local authorities it is unlikely that anything other than a token contribution can be anticipated.

"Gaps" in accessibility on the network

Deepdene currently provides two services per hour in each direction. The earliest trains are around 6.00am and the service continues until around 12.00pm seven days a week.

On the North Downs Line the nearest "accessible" stations to Deepdene with regular services to Gatwick Airport are at Reigate (5.5 miles to the east) and Guildford (13.25 miles to the west).

Closer stations, such as Dorking West, have a sparse service pattern of slow trains that terminate at Redhill and require further interchanges to reach Gatwick and beyond. Furthermore, industrial development around Dorking West precludes the provision of bus or taxi services at that station and access to destinations within the town and its surrounding areas requires pre-booking of taxi services. Interchange with Dorking Main is impossible.

However:

Without prejudice to any claim for AfA funding, and although we appreciate that re-development schemes under this and Network Rail's national CP6 Strategic Business Plan may be mutually exclusive, we believe that the existing infrastructure at Deepdene is life expired and incapable of supporting further passenger growth in a safe and convenient manner. We feel that consideration should additionally be given to rebuilding Deepdene as an interchange station fit for the future.

This view is derived from concerns not only at the age and condition of the timber and steel structures underpinning the station but also that, when combined with the high level of passenger usage at the station and increased capacity of the trains, a Safety and Evacuation Case investigation would undermine any proposal limited to addressing the access issue alone.

Given the Network Rail Control Period 6 Strategic Business Plan in preparation (covering the same period as the AfA fund), with its principal themes of safety, efficiency and future growth, we suggest that it would be useful to determine, additionally, whether there is a case to consider station redevelopment as whole as opposed to a limited scope, and potentially not cost effective, AfA upgrade.

With the annual footfall of 600,000, of which 200,000 interchange with eastbound services into the Gatwick Airport economic development area despite its current inaccessibility, the station is in a prime position to service suppressed demand, not only locally but also for journeys from stations in the SW London quadrant to the Gatwick area as well as destinations along the Sussex Coast.

The recent announcement by Gatwick Airport, with the potential of an additional 30% in passenger numbers, adds further pressure to encourage rail usage on routes into the airport. We feel that this development is likely to attract financial incentives to upgrade rail access at potential rail feeder stations, for which Deepdene is a prime candidate.

A recent proposal suggested the installation of lifts to solve the access problem (reference: Surrey County Council and First Great Western "Dorking Sustainable Transport package 2015"). However, that proposal took no account of the age and condition of the existing facility nor did it recognize the need to evaluate, and resolve, safety and evacuation issues prior to any large expenditure on the station. Resolving those requirements would incur significant additional costs, both in the short and medium term, to the extent that it would likely be more cost effective to re-develop the station as a whole.

We therefore include, as an Annex to this application, details of the work carried out by our members in preparing submissions regarding the future of Dorking Deepdene station, not only in the context of the Access for All (AfA) programme but also the possibility of its rebuilding as part of a major infrastructure programme during Network Rail's CP6.

In the context of the DfT AfA programme, we are in contact with Great Western Railway (GWR), Network Rail, Surrey County Council and Mole Valley District Councils and expect to meet with them shortly. Representations have also been made to the North Downs Line Community Rail Partnership, of which Dorking Town Forum is a member.

Yours sincerely, for Dorking Town Forum

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Photographic Evidence



Figure 1 Recently constructed "bus shelters" for 600,000 passengers per year

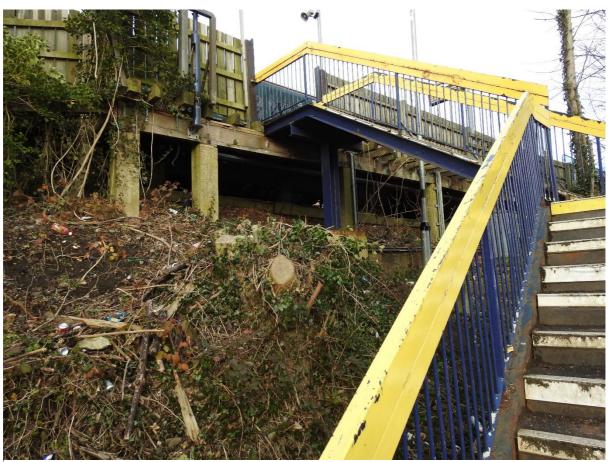


Figure 2 Steep access stairs

Current Station Condition.



Figure 3 Platform structure and poorly accessible utilities control cabinet





Figure 4&5 Extensive corrosion beneath access stairs

Site Access and Movement



Figure 6 Narrow Station and Site Access - North Side, adjacent to A24 Bridge



Figure 7 Station and Site Access - South Side, adjacent to A24 Bridge



Figure 8 Western and central arches of Pixham Bridge (to the east of the existing station)



Figure 9 Embankment and Pixham Bridge, east of platforms, potential location of new platforms and Dorking Main access



Figure 10 Embankment and A24 Bridge, west of existing platforms

Annexe

Deepdene Station Redevelopment Proposal - Dorking Town Forum

Summary

The scheme proposed by Dorking Town Forum is an evolutionary three-stage, structured risk, project which aims to progressively resolve station access, evacuation and interchange issues including capacity (and ease of upgrade) to meet future demands for rail travel.

Interference with ongoing passenger's services during construction phases is minimized by the site layout and sequential phasing combined with maximization of design potential for off-site fabrication. Site safety during construction is enhanced by the same layout and sequencing.

Current and future safety and evacuation requirements would be completely fulfilled, for all usage levels, on completion of Phase I.

The final station configuration would provide complete accessibility combined with platform-to-platform access to the nearby Dorking Mainline railway station, facilitating growth in passenger numbers well into the future.

Dorking Deepdene station consists of two 75m timber platforms on the top of a 7m embankment. Access is via a pair of steep stairs and passenger facilities are limited to a pair of shelters the size of bus shelters. It is currently estimated the station services around 600,000 passengers a year, approximately one third of whom are interchanging between Deepdene and Dorking Main. The station is inaccessible to the elderly, infirm, passengers with heavy baggage or leisure equipment, parents with small children and buggies and passengers with any sort of physical disability. This not only significantly limits growth of local usage but also use by passengers travelling to Gatwick Airport and the Gatwick Airport economic development area from SW London for work or air travel.

Due to its age the station is covered by "grandfather rights" and has no Safety and Evacuation Case. This is despite the increase in the passenger usage estimate since the mid-2000's and the impending introduction of longer trains on the North Downs Line. Particularly concerning is the difficulty of evacuating a disabled or non-ambulatory injured passenger(s) in the event that it became necessary.

Station property boundaries are delineated by the base of the embankment and construction access is limited the existing narrow areas and access used by passengers. Heavy equipment would have to be brought in by rail and level storage areas for materials and equipment within and surrounding the site are non-existent. Construction operations could, if not carefully planned and included in the design specification, lead to major disruption to passenger services for a considerable period.

Phase I involves constructing two new platforms, nominally 100m long, to east of the existing platforms. Prior to that two pile supported service platforms would be constructed adjacent to the existing platforms, but down embankment, to serve, in the early stages of this phase, as storage areas for materials and equipment. To aid construction, and minimize line crossing, a semi-permanent access path would join the two new platforms via the western arch of Pixham Bridge, which lies immediately to the east.

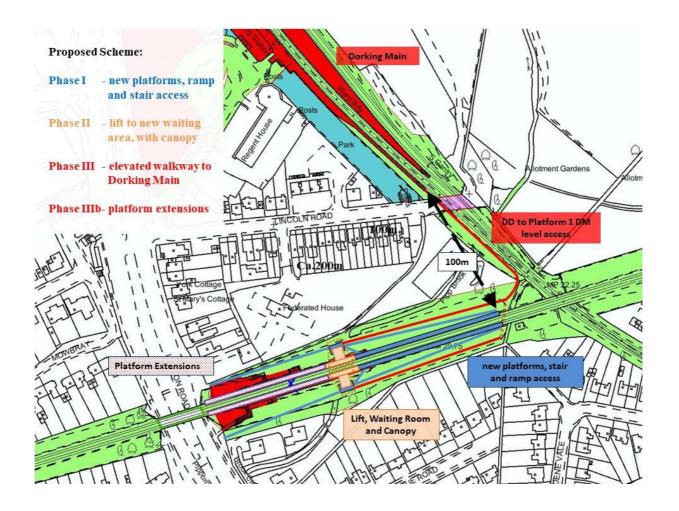
At the end of Phase I construction the service platforms would be cleared and resurfaced to become level station concourses, with ramp and stairway access to the new platforms and ramp/path access to station entrances. Pile patterns would be designed to support functionality extensions required in Phase II.

Phase II involves removal of the existing wooden platforms to make room for the addition of short platform sections at the western end of the new platforms. Supported by vertical extensions from concourse support piles these platform sections are extended laterally to create landing areas for low profile compact lifts, plus covered waiting rooms and working areas for equipment and electronics (some of the latter may also be installed at concourse level). A canopy could be provided to cover the lift access, waiting room and concourse areas on each side of the station.

Phase III involves installation of an approximately 100m long elevated walkway, within the Network Rail property boundary, east from Deepdene station to a widened and slightly extended Platform 1 at Dorking Main. The access point at Deepdene would lie adjacent to the Pixham Bridge and the construction pathway between the two new concourse platforms, built in Phase I, would be upgraded to passenger standard surfaces and lighting.

Should passenger growth or train configurations require it, the new platforms can be simply and cheaply extended westwards, **Phase IIIb**, to the full 200m available between the bridge over the A24 London Road and Pixham Bridge, without compromising the safety and evacuation case or major interference with operation of the station.

Phase I funding can be covered by the need to replace the existing structures, create capacity and meet current safety standards for the higher capacity trains being brought into service. **Phase II** funding would be covered by the accessibility component in funds for station renewal and safety, whilst **Phase III**, platform-to-platform connection and **IIIb**, further platform extensions, may be funded through regional support for economic development and growth.



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Dorking November 16th 2018

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1.0 Background

Deepdene Station handles around 600,000 passengers a year, about one third of them interchanging between Deepdene and Dorking Main. The original station was built in 1851 with timber platforms and, originally, a wooden ticket office and signal box (both since removed). The platforms sit on top of a 7m high embankment, albeit with a 1:100 down slope to the east.

The station remained relatively unchanged until 1969, when the original ticket office was demolished and the (shortened) timber platform deck and supports replaced, again in timber. At this time metal shelters were installed for passengers.

The original single wooden staircase was replaced in 1984 with two metal staircases, one on either side. There is no ramp access at all and the steps themselves are long, narrow and steep.

A few years later the platforms were extended, to 75m, to cater for longer trains (Thames Turbo, three coach). Further increases in train length are planned (to four coaches and 80-92m) with introduction, we understand, within two years.

Due to its age and historically very low usage estimate, the station has required no Safety and Evacuation Case. That said, usage estimates were heavily revised in 2008 but, for some reason, the impact was ignored. As far as can be established the issue of poor access, as well as capacity requirement and lack of evacuation facilities for introduction of longer trains, has yet to be considered by infrastructure and rail service providers.

The condition of not only the wooden platform structures but also the steel stairs has also become a concern. Recent examination, during upgrade work on the station, revealed poor structural timber condition under the platforms and, further, extensive corrosion under the access stairs. Routine inspections over the last ten years have highlighted the structural condition of timber and steel structures on the station, identifying defects that, as far as can be seen, have remain unattended to. It is not clear what the status and residual life of these structures is and whether they can be considered fit to support even the most limited station of upgrades and, if so, how long into the future.

Deepdene Station is a recognized 'gateway' to facilitate interconnectivity between two key rail lines, the Horsham to London line, via Dorking Main station, and the Reading to Redhill/Gatwick line. Given the necessary investment a seamless rail-to-rail connection can be provided between the two stations in a similar way to changing platforms at a large station.

Poor access, however, is seen as a major barrier to not only greater use of the rail option by local residents but also by visitors to or transiting Dorking. Additionally, and most importantly, the high level of interchanges suggests passengers, most likely from SW London, have identified it is quicker route to Gatwick Airport, airport development area and the South Coast. However, the poor access for mobility

impaired, elderly, passengers with heavy luggage or equipment and/or children severely restricts usage by these groups.

Improving access and connectivity would release significant economic, social and environmental benefits, not only to the local area but also airport users and employees at the airport and in the Gatwick development area and beyond.

2.0 Usage and Growth Potential

Deepdene is one of three stations in the Dorking Station Group. Until 2007 DfT estimates of passenger usage, calculated using a national station usage model, were very low, only 2474 entries and exits per annum for the year 2006/7, albeit with a very high level of interchanges (172,860).

The net result was that the station was viewed as a small rural station and ignored in terms of investment funding for capacity and access improvements.

Intervention by the Dorking Market Town Health Check, in 2006, coincided with a DfT review of its modelling approach (at the time the quality of model generated usage estimates for Group Stations were particularly unrepresentative across the UK) and resulted in the usage estimate increasing to 495,310 for the year 2007/8 with, additionally, 52,049 interchanges.

	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16
Entries/Exits	1,706	2,474	495,260	443,106	408,757	382,194	338,456	454,909	464,485	443,887	419,441
Interchanges	164,966	172,860	52,049	69,465	76,082	91,050	161,955	181,587	189.826	207,121	212,494
Total	166,672	175,334	547,309	512,257	484,839	473,244	500,411	636,496	654,311	650,606	631,935
Interchange Ratio	96.7	69.9	0.105	0.157	0.186	0.238	0.479	0.399	0.409	0.467	0.507

The usage model took a little time to stabilize following the change but latest usage estimates, from 2016/17, show 398,912 entries and exits, with 199,803 interchanges (a ratio of 0.501). In recent years rail passenger numbers in the South East area have suffered as a consequence of industrial action and poor service reliability however, on ORR figures, passenger numbers interchanging at Deepdene continued to grow.

Eastbound services from, Deepdene are heavily used by commuters into the Gatwick Airport economic development area, not only from Dorking but Epsom, Ewell and SW London (hence the relatively high level of interchanges). Deepdene has the highest ratio of interchanging passengers, compared to (local) entries and exits, of any group station in the UK and typically, more than 80 passengers can be counted per platform, waiting to board peak period trains to either Guildford or Redhill/Gatwick Airport.

Whilst we feel potential growth in local demand is not insignificant, a potentially larger source of growth is travel to the Gatwick Airport economic development area and, specifically, the airport itself.

Residents of Epsom, Ewell and South West London travelling to these destinations have limited choices: train to Victoria or Clapham Junction, a time-consuming journey involving trains which can be crowded at peak times; travel via Dorking Main and Deepdene, with its current accessibility problems; or use a car or taxi. We would suggest the latter is, currently, the favoured route (a choice which might be relatively easily verified using airport records).

Better access at Deepdene, particularly platform to platform, would improve the convenience, comfort and time/cost of the rail alternative for the public travelling from those areas and lead to increased patronage of existing trains running to and from Dorking. As most of these journeys would be taken counter peak flow or on sections of the route, or at times when load factors are low, rail companies would see an increase in revenues with no impact on operational costs (there are currently two trains per hour from both London Victoria and London Waterloo).

It is estimated the increase in fare revenue from both local and interconnecting travel would, on its own, likely be sufficient to fund the proposed complete re-development of Deepdene Station (on a 30-year life basis).

3.0 Specific Challenges

3.1. Accessibility

The station came bottom in a recent UK survey of station accessibility. There is no ramp access at all and the steps themselves long, narrow and steep, making access difficult for all but the able-bodied. Even then, passengers with any volume of baggage, small children or bicycles are severely disadvantaged.

Surrey and FGW, in their recent Dorking Sustainable Transport funding bid, proposed installing lifts. However, that proposal did not consider the condition of the existing station structures, pre-existing and updated station evacuation problems and the effect construction would have on train operations (see Appendix).

3.2. Condition of Structures

The timber platform structures were renewed in 1969 and steel stairs installed in 1984, making them 50 years and 34 years old respectively. Two station inspections, in 2010 and again in 2016, identified a number of defects in the structural elements they were able to access (not all areas under the station are easily inspected). The reports served to highlight concerns regarding the condition of platform and access primary structures. Research carried locally by a team scrutinizing the Dorking Sustainable Transport Project failed to identify any evidence that the structural defects listed by inspectors had been addressed.

However, Network Rail asset records accessed by the team show that, despite this, recorded residual life of the affected components had been increased. At the present time NR records state there is still a residual structural life (before replacement) of between 15 and 30 years depending on the component.

3.3. Safety

Owing to its age and lack of significant changes in the last 35 years, Deepdene has no Safety and Evacuation Case. It is covered by "Grandfather" provisions. That view was likely reinforced by the low usage estimates produced by Department of Transport prior to 2007.

The large change in the station usage estimate, in 2008, should have automatically triggered a review of safety and access/evacuation. However, despite local attempts to address the issue via public bodies and elected representatives, this has not happened. (The Dorking Health Check did, however, persuade Network Rail to carry out a preliminary study of improving accessibility/evacuation by adding ramps.)

Furthermore, the impending introduction of longer trains on the North Downs route does not appear to have triggered a review of station capacity and evacuation provisions along the line. This is particularly critical at Deepdene given the shortness of its platforms, location on top of a 7m embankment and lack of evacuation routes other than the stairs.

As it currently stands it is likely the current platforms and access stairs would fail the most basic safety and evacuation evaluation.

3.4. Design/Construction Challenges

Essentially the station sits on a narrow tract of land delineated either side by the fences, paths and gardens at the base of the railway embankment. In the track direction it is delineated by two bridges, the A24 London Road bridge, to the west, and the Pixham Bridge, to the east. Presently passenger access the station at ground level adjacent to the A24 London Road bridge, ascending/descending steep stairs to access platforms about 7m above ground level. Line gradient is 1:100 past the station. The resulting down slope, to the east, means the embankment height adjacent to Pixham Bridge, 200m away from the A24 bridge, is 2m lower than adjacent to the A24 bridge.

Other than trackside, the only external site access is via the existing passenger entrance. Whilst wider on the south side, access on the north side is only 2m and both would mean significant interference with passenger access. Even then the access is only wide enough for site workers, anything much larger than hand portable material and tools being unviable.

Residential and industrial development and narrow footpaths completely surround the boundary on three sides. There are no flat areas for storage and facilities within the site boundaries or within easy reach by construction teams. Hence some form of temporary arrangement for the construction phase would have to be installed.

4.0 Proposed Re-development of Dorking Deepdene Station

Phase I:

Install pile supported intermediate platforms adjacent to and below the eastern end of the existing platforms. This provides both temporary workforce facilities and storage areas during the construction phase and, once construction is complete, becomes the landing for stairs and upper ramp access. (The intermediate platform provides a base for lift access, passenger/station utilities and canopy for Phase II facilities, hence needs to be fully designed for that function during Phase I).

Construct basic path, eastwards, between north and south platform sites, utilizing the western arch of the Pixham Bridge. This provides for safe movement of site workers between the two worksites during construction, avoiding the need to cross the tracks. It also provides a path for utility and signal cable ducting

Install two, nominally,100m new platforms adjacent to, and to the east of, the existing platforms (adjacent to Pixham Bridge parapet). These would accommodate the new, longer, trains being brought into service on the North Downs Line.

Install stairs and linear ramp between train and intermediate platforms. Re-install switchgear and utility cabinets on intermediate platforms at working access height.

Renew entry paths and/or install low gradient ramp access between existing station entry points and intermediate platforms. If necessary, revise facilities and layouts at the ground level entrances.

Phase II:

Remove original wooden station platforms. Install platform extension, new waiting area and lift landing at western end of new platforms (using pile extensions from concourse platforms). Install low-profile compact lift between intermediate platforms and waiting areas. Install canopies over lift, waiting and concourse levels.

Install ticket machines, information systems and, if required, ticket barriers on concourse level. Revise ground level entrances.

Phase III:

Widen southern end of Platform 1, Dorking Main, to full width and length available within NR ownership boundary. At Deepdene upgrade basic footpath joining two platforms via Pixham Bridge to operational passenger standard surfaces, lighting and signage.

Install, within NR boundary, approx. 2.5m wide elevated walkway between Deepdene Station and Platform 1 Dorking Main, including a footbridge over Lincoln Road adjacent to the existing railway bridge.

Phase IIIb:

Extend existing platforms to utilize the full 200m available between A24 London Road and Pixham bridge parapets.

5.0. Indicative Cost Estimate

At this stage it is only possible to establish indicative costs. However, the estimates below are based on a number recent Network Rail station upgrades, both in the SE area and elsewhere in the UK. These are either of similar complexity or have elements directly comparable with elements of the proposed re-development.

	Phase I	Phase II	Phase III		
Indicative Cost	£5m	£5m	£5m		
* Screening Level 6	estimate, +/- 40%	Section 1 Section 2 Sectio	Compared Com		

Estimates are of "Screening Level" quality, that is to say based on bulk unit rates/costs derived from the exemplar projects. That gives a whole project cost range of £9-21m. More detailed examination/information of Network Rail construction costs, along with a more detailed project definition, would, of course, improve the quality of the estimate.

6.0. Business/Operational Case

Phase I:

The existing platforms at Deepdene are well beyond their economic life and have insufficient length to fully service the longer trains due to be introduced shortly on the North Downs Line.

Current platform configuration does not lend itself to (further) adaptation by adding lifts alone and, even if combined with in-situ platform and stair replacement, construction would cause enormous disruption to passenger journeys for a considerable period.

Addition of ramps and/or improved stairs, to address access and evacuations issues, would also incur significant additional cost.

The **Phase I** proposal, to install new platforms and access facilities to the east of the existing, with stair and ramp access, allows improved facilities to be constructed at a lower cost and shorter schedule than would be the case in re-constructing the existing station.

The intermediate platforms provide storage and facilities within the site boundaries during the construction phase. As construction is drawing to a close these would be converted to a station concourse, with landings for stairs and ramps. Space would be available to bring switchgear and utility cabinets into a single location, making routine maintenance and repair easier and more efficient.

The intermediate platforms will be sufficiently large and have foundation pile patterns and capacities to meet the needs of Phase II, that is support platform lift access area, waiting shelter, concourse and associated canopy(s).

This initial phase improves access for a majority of potential passengers currently unable to access the station. This would include mobile elderly, parents with young children, mobile passengers with heavy luggage, mobility scooters and cyclists. This travel market segment represents a significant part of the growth potential for passengers to and from Destination Dorking.

Whilst the facilities may not fully meet requirements for disabled access at this stage it does allow the station to fully meet safety and evacuation criteria for all train configurations, including evacuation of disabled and/or injured passengers, from day one and well into the future.

<u>Phase I provides the greatest opportunity for growth of passenger numbers, and revenues, to and from Destination Dorking.</u>

Phase II:

This phase uses the space created by removal of the existing station platforms to provide waiting rooms, at platform level, consistent with 600,000+ passengers per year, along with the lift access required to fully cater for the most mobility impaired passengers. Further re-positioning of utility and service cabinets to within the covered level areas enhances maintainability and, it is probable, reliability of equipment.

This improves information and waiting facilities for all passengers, brings the station into full Access-for-All compliance and further improves maintainability/operability.

Phase II removes all residual barriers to growth of passenger numbers to and from Destination Dorking and enhances travel to the Gatwick Airport economic development area and beyond.

Phase III:

Provides platform to platform access to interchanging passengers, the majority of whom either work in the Gatwick Airport economic development area or are travelling to and from Gatwick Airport and beyond. Given forecast growth in air travel and environmental considerations in the Gatwick Diamond Economic Development Area this is seen as the major, long term, rail passenger growth opportunity for the station.

This also seen as the major revenue growth generator for rail travel to and through the station.

<u>Phase III maximizes the opportunity to grow of passenger numbers between the</u> Epsom and SW London areas and the Gatwick Airport development area and beyond.

Phase III b:

If growth in rail travel to and through the Gatwick Airport and beyond continues in the long-term station platforms can be easily extended westwards, to around 200m in length, and facilities adapted to cater for longer trains.

7.0. Funding

Phase I: Funding for Station Renewal and Essential Safety Work (Network

Rail/Department for Transport);

Phase II: Access for All (Department of Transport), Regional Development

Funds, Gatwick Transport Sustainability (MHCLG);

Phase III: Regional Development Funds, Gatwick Transport Sustainability

(MHCLG);

Phase III b: Regional Growth Funds (Sustainable Transport), Reading, Gatwick,

Heathrow Development Zones

8.0. Appendix - Options Analysis

A number of options for access at Deepdene have been tabled in recent years:

Option a) Ramp access to eastern end of existing platforms.

A screening level scheme generated by Network Rail for the Dorking Market Town Health Check, in 2006, staying within preferred gradients and design guidance and site boundaries, required an extensively zig-zagged ramp.

A "cheap-and-dirty study", there was no consideration of condition of station structures or the possibility of moving the platforms. That said, failure to take into account the 1:100 gradient (reducing the height difference between roadway and platforms to the east) was major flaw that undermined the identified solution.

However, taking into account the 1m reduction in platform height above ground and depending on construction methods, a low-cost scheme with minimal interference with passenger service operations was possible.

Once the gradient and height differences are taken into account the report does provide a sound basis to examine further options.

Option b) Lift access to existing platforms.

This formed the basis of Phase II of the Surrey/FGW Dorking Sustainable Transport Package, Phase I, recently constructed. (Phase III of that plan made reference to the construction of a new station building, gatelines and subway but did not mention of the need to replace station platforms.)

Installation of lifts to the existing platforms is difficult in the confines of the site and the groundworks involved would be extensive. Installation close to the trackline would involve sheet-piling, and removing, a section of the embankment; with installation of a large foundation and short bridge, including wheelchair maneuvering space, to each platform. Lack of level areas within or nearby the station boundaries would make materials and equipment logistics difficult.

The project would not only mean installing modern facilities at a station where existing structures are very close to the end of their economic life. It would also make the logistics, and cost, of replacing the existing platforms significantly higher.

Furthermore, without a corresponding ramp access, along with an increase in stair capacity, the station would still not meet evacuation requirements for current train capacity (let alone the increased capacity need for the introduction of four coach train)s. Installing these would increase costs significantly.

Overall, construction would incur significant disruption to train operations and, hence, passenger's journeys for a significant amount of time.



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