

HIGH SPEED RAIL (LONDON - WEST MIDLANDS) ADDITIONAL PROVISION

Environmental Statement

Non-technical summary

September 2014 ES 3.0

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High Speed Two (HS2) Limited has been tasked by the Department for Transport (DfT) with managing the delivery of a new national high speed rail network. It is a non-departmental public body wholly owned by the DfT.

A report prepared for High Speed Two (HS2) Limited:

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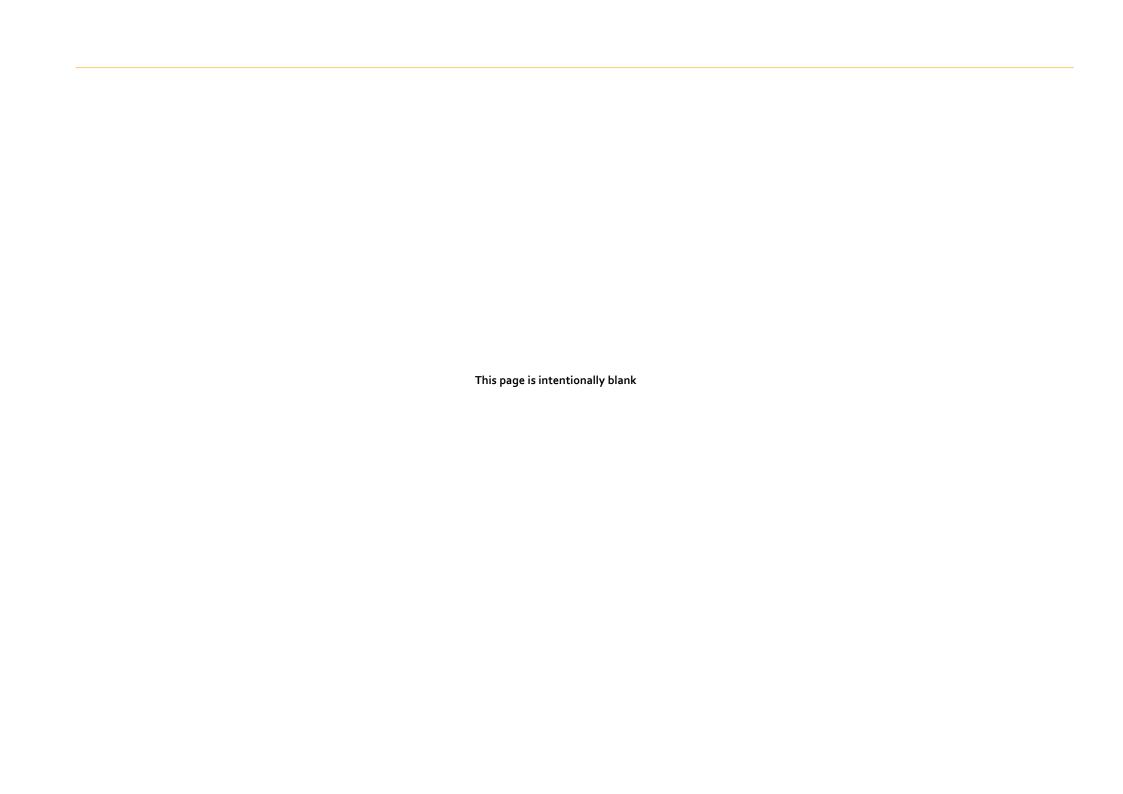


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1. Introduction

This document is the Non-Technical Summary of the Additional Provision Environmental Statement (September 2014) to the High Speed Rail (London-West Midlands) Bill 2013 ('the Bill'). Its purpose is to report the assessment of the new or different likely residual significant environmental effects arising from the amendments which make up the Additional Provision.

The Bill was originally submitted to Parliament together with an Environmental Statement (the 'main Environmental Statement') on 25 November 2013. If enacted by Parliament, the Bill will provide the powers to construct, operate and maintain Phase One of High Speed Two (HS2) ('the project'). This phase of the project will provide a new north-south railway between London, Birmingham and the West Midlands.

Since the deposit of the Bill, 55 generally minor amendments to the design of the project have been identified as a result of:

- further discussions with landowners and occupiers;
- design refinements; and
- changes to accommodate the requirements of utility companies.

These amendments require either the acquisition or use of land outside the original limits of the Bill, additional access rights, or other extensions to the powers in the Bill. Such amendments require the submission to Parliament of what is called an 'Additional Provision' in order for the amendments to be considered.

In the case of this Additional Provision, the amendments to the project include:

- utilities requirements: the project affects a number of electricity, gas, fuel and fibre optic lines provided by utility companies, either in or above the ground. Since submission of the Bill a number of utility companies have refined their requirements and so changes to the design of these works are needed. These are principally amendments to the amount of land required temporarily for works to pylons and electricity wires and for rights to allow these wires to be suspended above private properties and land;
- access arrangements: amendments to the locations, alignments or width of some access tracks proposed as part of the 'original scheme' (the scheme reported in the main Environmental Statement). In addition, access rights to allow vehicles to use private roads and tracks are required for

- construction and maintenance. These tracks are required to provide private access to properties and agricultural holdings; access to undertake utility diversions; and to facilitate the construction or maintenance of project infrastructure (e.g. balancing ponds and areas where new habitats will be created);
- roads and public rights of way: changes to the locations of temporary diversions or permanent realignments;
- balancing ponds: these temporarily store and then discharge rainwater that runs off the railway to nearby rivers and drains. They control the flow of water during rainfall and in some cases allow the water to be absorbed into the ground. Since the deposit of the Bill, it has become clear that one of the proposed balancing ponds should be moved to a different location from that identified in the main Environmental Statement; and
- an area of grassland habitat mitigation: where it has not been possible to avoid the loss of important habitat, replacement habitat will be provided. Since the deposit of the Bill, it has become clear that an area of proposed replacement grassland habitat mitigation should be moved to a

different location from that identified in the main Environmental Statement.

Parliamentary rules require the Additional Provision to be accompanied by an environmental assessment of the likely significant effects of the amendments to the design of the project. The findings of the assessment are presented in the Additional Provision Environmental Statement and summarised in this Non-Technical Summary. This environmental assessment has, in the main, applied the same scope and methodology described in the main Environmental Statement.

The measures that will be used to mitigate likely significant adverse environmental effects during construction and operation of the project are described in the main Environmental Statement, Non-Technical Summary and the draft Code of Construction Practice (which sets out measures to manage and control the effects of construction), which were submitted as part of the Bill. The environmental assessment for the amendments in the Additional Provision has applied the same generic mitigation measures described in the main Environmental Statement.

The Additional Provision Environmental Statement includes the following documents:

- this Non-Technical Summary: which provides a summary of the amendments included within the Additional Provision and any new or different likely residual significant effects, whether beneficial or adverse, on the environment as a result of the amendments. Residual effects are those significant effects which are likely to remain after mitigation measures are in place;
- Volume 1: An introduction to the Additional Provision to the project, including an overview of the works required, the associated construction techniques and the environmental impact assessment process which has been applied;
- Volume 2: Community forum area reports and map books provide a description of the amendments included in the Additional Provision at a local level. The reports describe any new or different likely significant beneficial and adverse effects of the amendments associated with the Additional Provision on the environment along the route. They explain the design and mitigation or compensation measures included in order to avoid, reduce

- or manage any adverse environmental effects. Their coverage corresponds to the areas covered by the consultative community forums along the route of the Phase One project (which were established by Government in 2012) as shown in Figure 1;
- Volume 3: Route-wide effects. Volume 3 describes the assessment of any new or different likely significant environmental effects of the amendments associated with the Additional Provision at a geographical scale greater than the community forum area level;
- Volume 5: Environmental topic maps associated with the community forum areas contained in Volume 2. In the main Environmental Statement, Volume 5 contained appendices that included supporting environmental information. Since there are limited changes needed to appendices as a result of the Additional Provision, any amendments to appendix material is provided in the relevant Volume 2 community forum area reports; and
- Glossary of terms and list of abbreviations. This includes new terms and abbreviations used in the Additional Provision Environmental Statement.

In the main Environmental Statement, Volume 4 presented an assessment of the environmental effects that will occur in locations away from the route (i.e. outside the community forum areas). None of the proposed amendments to the project design set out in the Additional Provision Environmental Statement relate to off-route areas. Therefore, off-route effects have been scoped out of the assessment and no Volume 4 is included within the Additional Provision **Environmental Statement.**

Following deposit of the Additional Provision Environmental Statement in Parliament, a public consultation will be held. At this time there will be a period to allow petitions to be deposited against the amendments in the Additional Provision. The High Speed Rail (London - West Midlands) Select Committee will then hear those petitions alongside petitions received against the Bill.

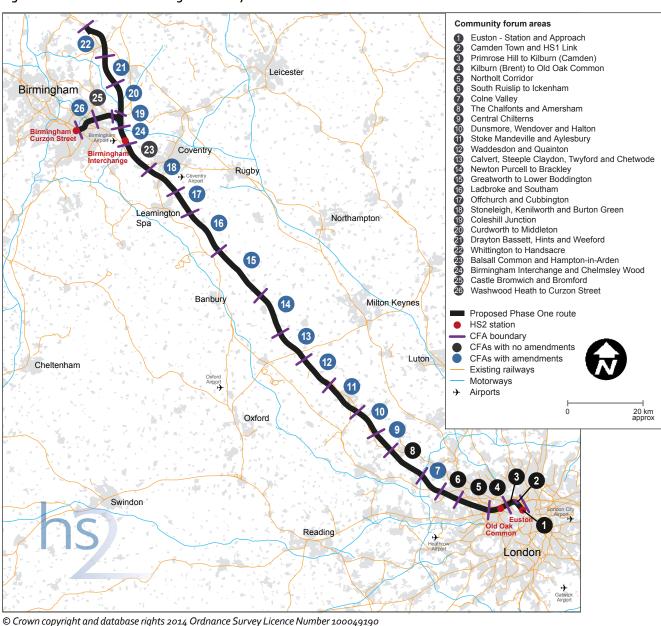


Figure 1: Phase One route showing community forum areas with and without amendments



2. Proposed works associated with the Additional Provision

2.1 Introduction

Most of the amendments proposed in this Additional Provision are minor changes that relate to works already proposed in the Bill. The rest of the works are generally minor additional works (mainly relating to electricity wire diversions) that increase the amount of land required to construct the project.

The main categories of works are described in this section.

2.2 Utility requirements

Diversions of overhead power lines

The construction and/or operation of the project may require temporary or permanent diversions, or raising the height of existing pylons and overhead power lines to provide clearance over the project. The Bill already includes the powers to divert overhead power lines that are affected by the construction or operation of the project. However, since deposit of the Bill, it has become clear that, in some cases, additional land and access rights are required to undertake this work. These works will involve a number of activities, including the following.

Construction of pylons

Pylons will be constructed for temporary or permanent diversions of overhead power lines or to raise the height of the existing overhead power lines to provide safety clearance over the route of the project.

Reconductoring

Once the pylons have been constructed, the conductors (wires that carry electricity) will be installed. Protective scaffolding and netting will be temporarily used to prevent the conductor wires from making contact with properties, roads and railways etc. during their installation. As part of the installation process, wires are run at ground level between the pylons. The wires are then lifted on to the cross-arms of the pylons and tensioned using a winch. Many of the amendments relate to additional land being required for the safe erection of scaffolding, or to provide an area for winching.

Earthing of the conductor

In order to protect construction workers from the risk of electric shock while working on the overhead power line diversions and associated pylon works, it is necessary to drain the electrical current from the conductors to the ground. This process is known as the 'earthing' of a conductor. Some of the amendments relate to additional land being required to allow for the earthing process to take place.

Typical winching site



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2.3 Diversions of fibre optic cables

There is a need to divert fibre optic telecommunication cables suspended from pylon routes whilst pylons are being either temporarily or permanently relocated.

Additional land will be required for temporary diversions of these fibre optic cables, which will typically be placed underground in shallow trenches. The permanent diversions of the fibre optic cables will be included with the overhead power line diversions.

2.4 Diversions of gas or fuel pipelines

The Bill already includes powers to divert gas or fuel pipelines that the project crosses. However, since submission of the Bill it has become clear that in a small number of cases additional land is required to allow the diversions to take place.

The additional land will be required temporarily to allow the lengths of replacement piping to be welded and tested onsite before being placed in the ground. Additional land will also be required, in one instance, to realign part of the route of a pipeline diversion. In order for these works to take place safely and efficiently, a temporary working corridor will be required.

Additional land and/or access rights will also be permanently required in some cases to provide utility companies with access to the diverted pipelines for maintenance.

2.5 Amendments to access tracks

The Bill includes a large number of access tracks for the project. These are required either temporarily to enable the construction of the project, or permanently to allow for the maintenance of the project.

Since submission of the Bill, a number of amendments to the design have been made regarding access tracks. These include widening or amending the alignment of access tracks that are either already existing or that were proposed as part of the original scheme. The amendments also include adding new access tracks that were not proposed in the original scheme or removing access tracks that were proposed. In addition, some of the amendments relate to providing access rights to existing private roads and tracks, so they can be used during the construction or operation of the project.

2.6 Amendments to roads and public rights of way

The Bill includes a number of temporary diversions or permanent realignments of roads and public rights of way (e.g. footpaths) in order to allow for the construction or operation of the project.

Since the submission of the Bill, a number of amendments have been proposed regarding roads and public rights of way. These include amendments to road and public rights of way alignments that were proposed as part of the original scheme. These also include additional road and public rights of way works that have been identified as being required since submission of the Bill and therefore did not form part of the original scheme. In addition, since submission of the Bill, it has been identified that works to some of the roads and public rights of way outlined in the main Environmental Statement are no longer required.

2.7 Balancing pond works

The project has been designed to be able to withstand, and to not increase the risk of, flooding. The project includes a range of drainage features to ensure that rainwater which falls on the railway is safely carried away without increasing the risk of flooding. Balancing ponds are key components of this drainage system, as they will temporarily store then release this rainwater to nearby rivers and drains or allow it to soak into the ground at a safe rate.

Since submission of the Bill, it has become clear that one of the balancing ponds should be located in a different area to avoid the partial loss of a local heritage feature.

2.8 Grassland habitat mitigation works

The design of the project has sought to avoid or reduce impacts on habitats, species and other features of ecological value; however, in some cases it will not be possible to do so. To compensate for these losses, replacement habitat will be provided. Since the submission of the Bill, it has become clear that one of the proposed replacement grassland habitat areas included in the original scheme should be located in a different area to avoid the partial loss of a local heritage feature.



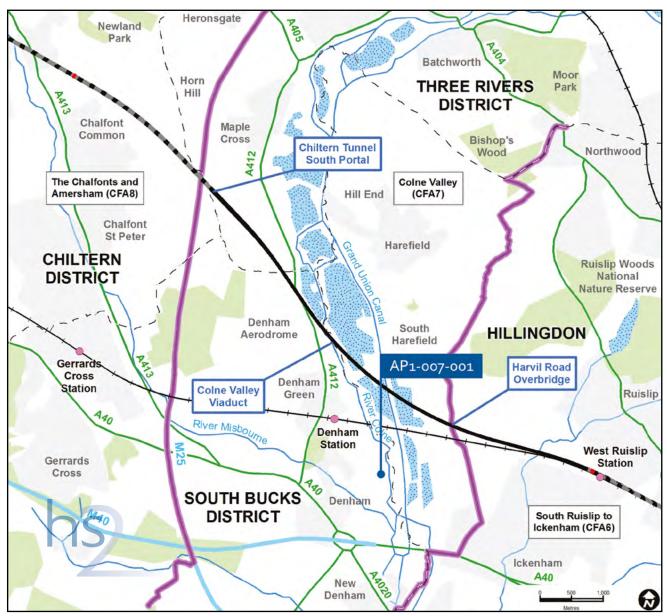
3. Summary of amendments

Tables 1 to 17 summarise each amendment (i.e. the 'revised scheme') which will be submitted to Parliament, along with a description of the 'original scheme' that was presented in the main Environmental Statement and submitted to Parliament in November 2013 as part of the Bill. Figures 2-18 show the approximate location of each of the amendments on a community forum area basis.

The legend for all the following community forum area maps is provided below:



Figure 2: Approximate location of the amendment for **Community Forum** Area 7 - Colne Valley

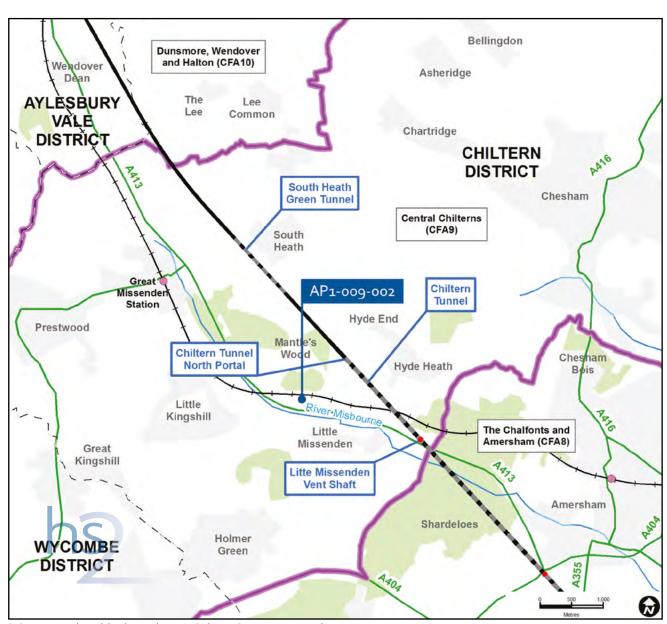


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Table 1: Summary of the amendment for Community Forum Area 7 - Colne Valley

Amendment	Description of the original scheme	Description of the revised scheme
Existing access through Buckinghamshire Golf Club for utility works AP1-007-001	The Bill provides for a new section of access track next to and parallel with a stream through Buckinghamshire Golf Club, with a temporary bridge over the River Colne, to enable construction access for the diversion of an overhead power line.	The access track in the Bill followed an incorrect alignment past the Buckinghamshire Golf Club clubhouse. The revised scheme will now use the same access that golf club members currently use to access the golf club car park. The revised scheme will use this access during construction. The access is to a temporary bridge over the River Colne to enable diversion of an overhead power line. No golf club car parking spaces will be required for the proposed construction and the access will remain open to the public where practicable. The additional land required (approximately 600 square metres) was outside the limits of
		the Bill.

Figure 3: Approximate location of the amendment for **Community Forum** Area 9 - Central Chilterns

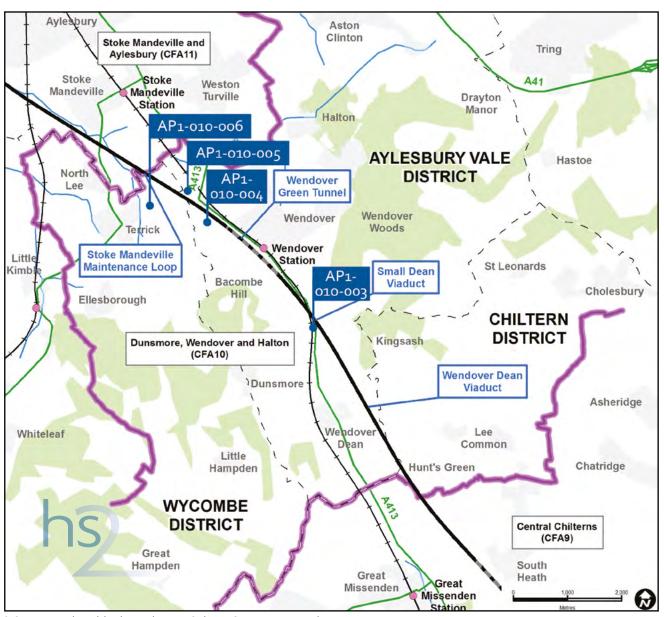


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Table 2: Summary of the amendment for Community Forum Area 9 - Central Chilterns

Amendment	Description of the original scheme	Description of the revised scheme
Additional land required for construction and maintenance access near No Man's Wood AP1-009-002	The Bill provides an access track from the A413 for the construction of a balancing pond (for railway drainage) and for the creation of an area of woodland habitat. The original scheme made use of an existing access track from the A413 to a property south of No Man's Wood. The remaining length to the balancing pond and woodland habitat was a new access following the route of an existing track between No Man's Wood, which is partly designated as ancient woodland, and Firs Plantation and John's Plantation.	A number of amendments to the Bill were required. The revised scheme alters the alignment of the proposed access track to reduce disruption to the property to the south of No Man's Wood, the adjacent Valley View Sporting Gun Club and to the area of ancient woodland (No Man's Wood). The revised alignment follows an existing track that runs alongside John's Plantation and the Marylebone to Aylesbury Line. The access track will be for construction and maintenance and will be slightly wider than originally proposed (3.5m wide) and will include passing bays to ensure that maintenance vehicles can use it safely. The additional 1.1ha of land was outside the limits of the Bill.

Figure 4: Approximate locations of amendments for Community Forum Area 10 - Dunsmore, Wendover and Halton



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Table 3: Summary of amendments for Community Forum Area 10 - Dunsmore, Wendover and Halton

Amendment	Description of the original scheme	Description of the revised scheme
Additional land required for utility works and access to the south of Small Dean Lane AP1-010-003	The Bill provides for reconductoring as part of works to realign overhead power lines 50m to the south of their existing route to the south of Wendover.	An additional o.5ha of land is required temporarily to erect scaffolding over the Marylebone to Aylesbury Line in order to safely undertake the reconductoring works. Additional land (o.3ha) is also required temporarily to enable reconductoring works to the pylon south of Small Dean Lane. The additional land was outside the limits of the Bill.
Additional land required for utility works to the north of Wellwick Farm AP1-010-004	The Bill provides for a temporary diversion, 70m to the south, of the existing overhead power lines and pylons west of Wendover. The overhead power lines will be reinstated along its existing alignment west of Wendover.	Additional land is required temporarily to enable the construction of one of the pylons, located to the north of Wellwick Farm. The additional o.3ha of land was outside the limits of the Bill.
Change to land required for reconfiguration of road layout of Nash Lee Lane and HS2 maintenance access AP1-010-005	The Bill provides for: - the permanent realignment of Nash Lee Lane and its junction with B4009 Nash Lee Road; - the additional provision of a junction (in the form of a crossroads) for maintenance access to the project.	The road layout requires an additional o.3ha of land to reconfigure the junction between Nash Lee land and B4009 Nash Lee Road and an amendment on the Bill Plans and in the Bill to the description of the work. The Nash Lee Lane access from the B4009 Nash Lee Road has been realigned, providing a gentler curve and shallower gradient. A reconfigured 'T'-junction off Nash Lee Lane will provide safer maintenance access to the project.
		Maintenance access to the adjacent balancing pond has been relocated. An area of agricultural land south-east of Nash Lee Lane has also been removed from the Bill to allow access between fields adjacent to The Hollies, a residential property.
		The additional land required for this amendment was outside the limits of the Bill.
Additional land to erect temporary scaffolding over B4009 Nash Lee Road AP1-010-006	The Bill provides for the temporary diversion, 70m to the south, of existing overhead power lines and pylons with permanent reinstatement along the existing alignment west of Wendover.	An additional o.5ha of land is required temporarily for a working area to reconductor the overhead power lines along their existing alignment. This will allow for the erection of scaffolding over the B4009 Nash Lee Road in order to safely undertake the reconductoring works. These works will not affect access to Flint Cottage or Nash Lee Road.
		The additional land was outside the limits of the Bill.

Figure 5: Approximate locations of amendments for Community Forum Area 11 - Stoke Mandeville and Aylesbury

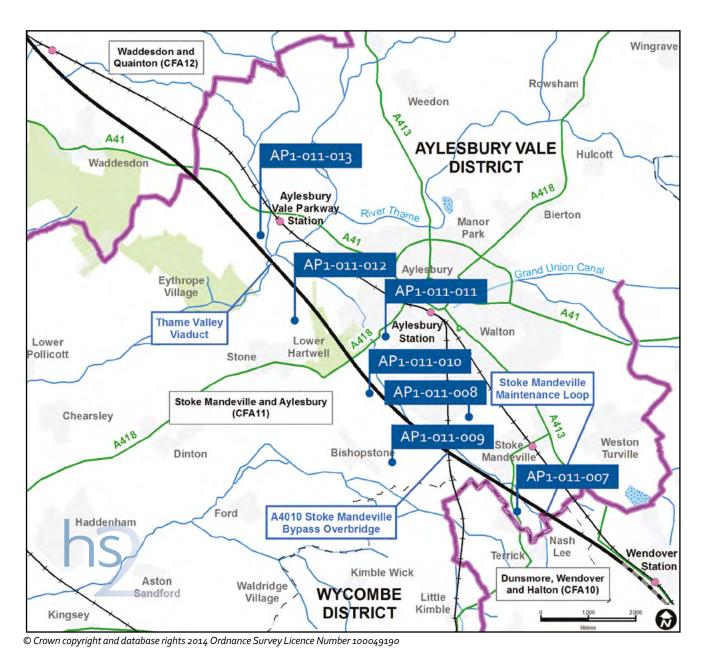


Table 4: Summary of amendments for Community Forum Area 11 - Stoke Mandeville and Aylesbury, continued on next page

Amendment	Description of the original scheme	Description of the revised scheme
Additional land required for the A4010 Stoke Mandeville bypass to the south of Stoke	The Bill provides a bypass of Stoke Mandeville as part of the project.	A recently completed care home for the elderly (Fremantle Court Care Home) was not considered in the main Environmental Statement. The care home is located just off Risborough Road, close to where the bypass connects with the A4010 Risborough Road.
Mandeville AP1-011-007		The A4010 Risborough Road has been widened to allow a right hand turn into the care home. The road layout of the proposed bypass has been amended to take this into account. Additional land is required for this amendment. The additional land was outside the limits of the Bill.
Change to land required for reconfiguration of the roundabout junction of the proposed A4010 Stoke Mandeville bypass with B4443	The Bill provides a bypass of Stoke Mandeville as part of the project. The bypass will tie in with the B4443 Lower Road, south of Aylesbury, with a new roundabout. The alignment and junction arrangement will require the demolition of an adjacent residential property: Elmfield,	A new road layout has been developed to avoid the loss of Elmfield. This involves moving, to the south-west, the roundabout and a small section of the B4443 Lower Road on the approach to the roundabout. An existing length of Lower Road that was due to be removed in the original scheme will be retained to maintain access to the adjacent properties.
Lower Road AP1-011-008	30 Lower Road.	The additional o.8ha of land required for the new road layout was outside the limits of the Bill. However, an area of o.9ha of land included in the original scheme is no longer required for the revised scheme, resulting in an overall reduction of approximately o.1ha.
Additional land required for utility access at Standall's Farm AP1-011-009	The Bill provides a permanent 3.5m wide access track from Bishopstone Road to Standall's Farm along an existing access. At Standall's Farm there is provision for access through the farmyard for maintenance of a balancing pond and pumping station and around the periphery of the farm to the east, for access, linking to the existing tracks north and south of the farm.	The access track from Bishopstone Road to Standall's Farm will need to be temporarily widened to 5m, in order to accommodate vehicles accessing a pylon during construction of the project. The additional o.4ha of land required to temporarily widen the access track was outside the limits of the Bill. Following the works to the pylon, the width of this access track will be reduced to 3.5m to enable permanent access to the balancing pond and pumping station. The provision of land for access through the farmyard outlined in the original scheme is no
Land no longer required for access to drainage ponds to the north of Bishopstone AP1-011-010	The Bill provides two access tracks to the ponds: one from Bishopstone Road and one from the A418 Oxford Road.	Ionger required and this has been removed in the revised scheme. The access road from Bishopstone Road is no longer required as the Bill includes an access track from the A418 Oxford Road to the ponds. Removal of this access will reduce the land required by approximately o.8ha.

Table 4: Summary of amendments for Community Forum Area 11 - Stoke Mandeville and Aylesbury, continued

Amendment	Description of the original scheme	Description of the revised scheme
Additional land required for utility works adjacent to the	The Bill provides for the temporary diversion of an overhead power line. The overhead power line would	A o. 2ha area of additional land is required temporarily to enable access to a pylon immediately south of the A418 Oxford Road and west of Dormer Close, Aylesbury.
A418 Oxford Road to the west of Aylesbury	be reinstated along the original alignment at a greater height to avoid the project.	The additional land required for this amendment was outside the limits of the Bill.
AP1-011-011		The reconductoring of the overhead power line over properties in Aylesbury as part of these works was not considered in the main Environmental Statement.
Additional land required for access to balancing pond from Lower Hartwell passing by Whaddon Hill Farm AP1-011-012	The Bill provides for a balancing pond north of Bridleway SBH/2 to the west of the Thame Valley viaduct provided as part of the project. Permanent maintenance access would be provided from Lower Hartwell on an existing access track through Whaddon Hill Farm.	The access track through Whaddon Hill Farm is not wide enough. Therefore, a new 3.5m wide access track with passing bays is to be provided around the farm to the north, to join two existing lengths of access tracks east and west of the farm. The additional 0.2ha of land required for the access around the farm was outside the limits of the Bill. The land for the access through the farm has been removed from the Bill as it is no longer required.
Change to land required for access to balancing pond west of Putlowes Farm	The Bill provides for a balancing pond south of Putlowes Farm to the west of the route. Access would be provided from a proposed new section of road from the A41 Bicester Road, connecting with Putlowes Drive through the yard of Putlowes Farm.	It has been determined that the whole of Putlowes Drive will be used for access. The proposed new section of road at the northern end of Putlowes Drive is no longer required and is to be removed from the Bill (0.4ha of land is no longer required).
AP1-011-013		Putlowes Drive will be widened to 3.5m with passing bays.
		An additional o.7ha of land is required to provide a new permanent access around Putlowes Farm to the north, avoiding the need to go through the yard.
		The additional land required for this amendment was outside the limits of the Bill.

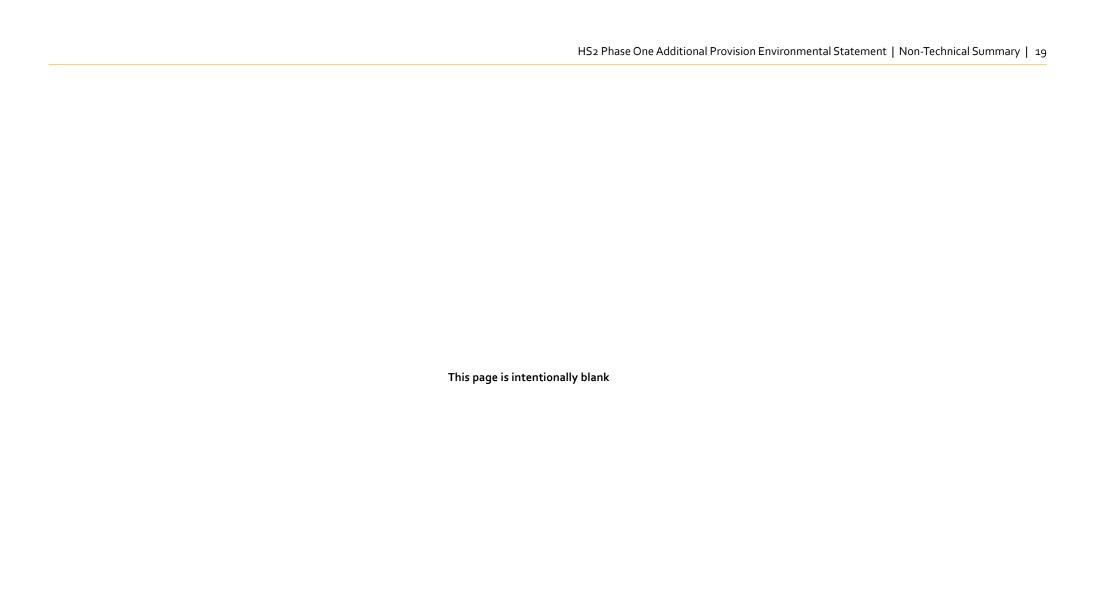
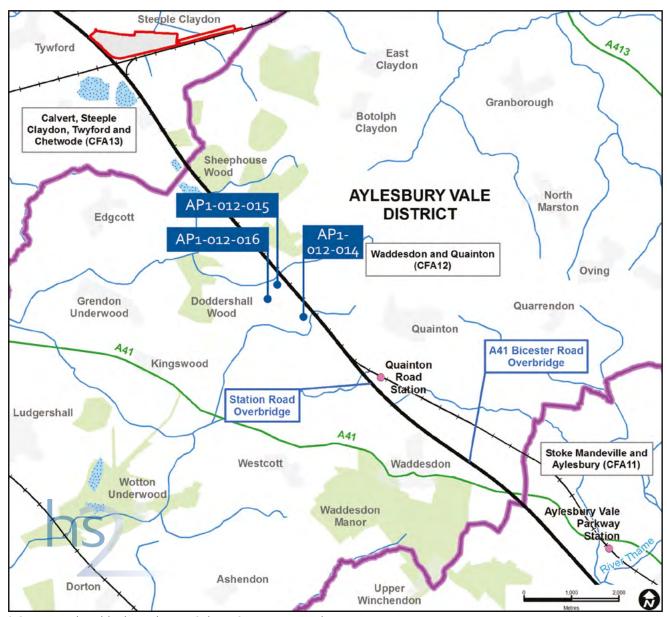


Figure 6: Approximate locations of amendments for Community Forum Area 12 - Waddesdon and Quainton

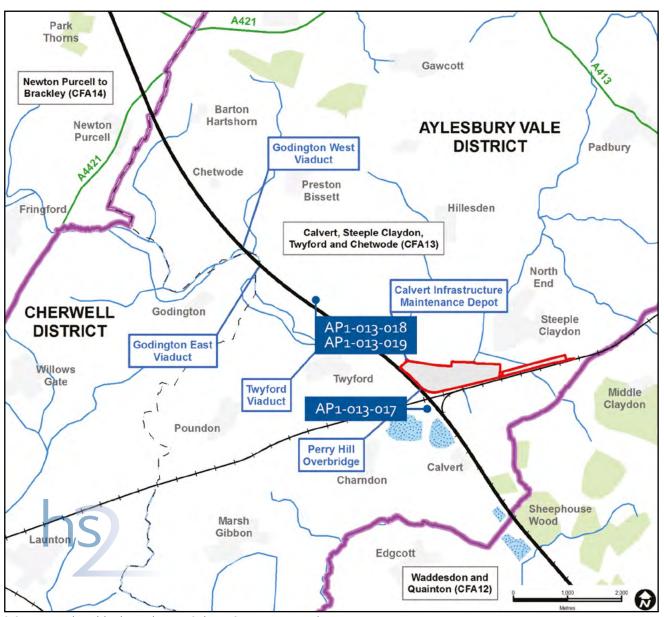


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Table 5: Summary of amendments for Community Forum Area 12 - Waddesdon and Quainton

Amendment	Description of the original scheme	Description of the revised scheme
Land required to mitigate the impact on the Doddershall Deserted Medieval Village AP1-012-014	The Bill provides for an area of grassland habitat mitigation and a balancing pond within the boundary of Doddershall Deserted Medieval Village, on the western side of the project at Quainton.	It has been determined that the grassland habitat and balancing pond should be located in different areas to avoid the partial loss of Doddershall Deserted Medieval Village. The grassland habitat and balancing pond will be located to the north and south respectively of their original scheme locations.
		The revised location for the grassland habitat will require an additional 8.7ha of land, which was outside the limits of the Bill. The land previously required for the grassland habitat and balancing pond in Doddershall Deserted Medieval Village has been removed from the Bill.
Land required for pylon works near Quainton AP1-012-015	The Bill provides for an auto-transformer feeder station near Quainton, and a new substation north of Edgcott Road, both on the eastern side of the route. This will allow for electricity to be supplied to the project.	An additional 11.4ha of land is required temporarily for reconductoring and earthing of the overhead power line from a pylon south of North Farm, to a pylon south of Pear Tree Farm. The additional land was outside the limits of the Bill.
Reinstatement of private access to Edgcott Road at Woodlands Farm Cottages	The Bill provides for the permanent realignment of Edgcott Road, 50m to the east of its existing location, across a new bridge.	An additional 350 square metres of land is required to provide private access (3.5m wide) to 1 Woodlands Farm Cottages from the realigned Edgcott Road. This additional land was outside the limits of the Bill.
AP1-012-016		

Figure 7: Approximate locations of amendments for Community Forum Area 13 - Calvert, Steeple Claydon, Twyford and Chetwode

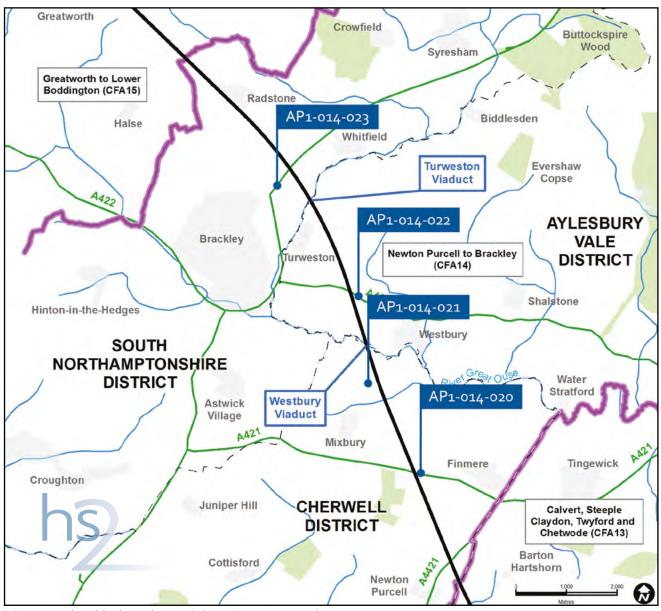


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Table 6: Summary of amendments for Community Forum Area 13 - Calvert, Steeple Claydon, Twyford and Chetwode

Amendment	Description of the original scheme	Description of the revised scheme
Extension of ground anchors at Calvert Jubilee AP1-013-017	The Bill includes the construction of the Calvert cutting which would run along the western side of the realigned Aylesbury Link railway for approximately 2.2km, before continuing north-west parallel to the former Great Central Main Line for approximately 1.8km. As the route passes the Calvert Jubilee Nature Reserve the cutting will include a retaining wall to reduce construction impact on a lake and a former landfill site. The retaining wall will be supported by 20m long ground anchors (which provide strength to the retaining wall).	The provision for ground anchors for the retaining wall will need to be extended. Rights are required to install ground anchors for up to 50m from the face of the wall, taking them outside the limits of the Bill.
Alternative maintenance and farm access for Cowley Farm AP1-013-018 and AP1-013- 019	The Bill provides for access to Cowley Farm and to two balancing ponds for maintenance. The access would be from Bicester Road to the south, via Twyford Mill to Cowley Farm (via Restricted Byway PBI/5A bridge). The Bill also provides for the temporary diversion of Restricted Byway PBI/5A over Footpath PBI/5 bridge during construction.	The proposed access to Twyford Mill is of insufficient width and would need to be improved and widened to accommodate maintenance vehicles. An alternative access will therefore be provided from the north, from Perry Hill and through Cowley Farm via the existing farm access (Restricted Byway PBI/5). The access track will be improved and widened to 3.5m, with passing bays. The proposed bridge over Footpath PBI/5 will also be removed as it is no longer required. This has resulted in approximately 1.5ha of land being removed from the Bill. The removal of the bridge will require Footpath PBI/6 to be diverted south, under the Twyford viaduct and Footpath PBI/5 to be diverted north over the Restricted Byway PBI/5A bridge. These diversions were outside the limits of the Bill. In addition, the temporary diversion of Restricted Byway PBI/5A over the Footpath PBI/5 bridge has been removed from the Bill.

Figure 8: Approximate locations of amendments for Community Forum Area 14 - Newton Purcell to Brackley



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Table 7: Summary of amendments for Community Forum Area 14 - Newton Purcell to Brackley

Amendment	Description of the original scheme	Description of the revised scheme
Replacement of private access to Warren Farm AP1-014-020	The Bill provides for replacement private access to the east of the project, for Warren Farm, from the A421 London Road.	The private access to Warren Farm has been realigned to reduce impacts on the farm. The revised access requires 0.4ha of land. This additional land was outside the limits of the Bill.
Al 1-014-020		The route of the access in the original scheme has been removed from the Bill. This will result in approximately o.6ha of land no longer being required for the revised scheme.
Provision of access to balancing pond near Mixbury AP1-014-021	The Bill provides for an access track to a balancing pond, located to the south of the River Great Ouse and adjacent to the Westbury viaduct.	In order to accommodate maintenance vehicles the access track needs to be widened to 3.5m and include passing bays. Land for the widened access track was outside the limits of the Bill.
Additional land required to install safety barriers along the A422 Brackley Road AP1-014-022	The Bill provides for an access track to Oatley's Farm and an access track for maintenance of the balancing pond on the east side of the route adjacent to the Westbury viaduct. Both of these access tracks have side road junctions off the A422 Brackley Road on the eastern approach to the A422 Brackley Road bridge.	The proposed side road junctions have been re-positioned to allow a suitable length of safety barrier to be provided on the approaches to the bridge.
Provision of an underpass under the A43 near Brackley AP1-014-023	The Bill provides for a permanent underpass to maintain the connectivity of Bridleways BD7 and BD10 under the A43 Oxford Road.	Additional earthworks are required associated with the realignment for the bridleway BD10 underpass below the A43 Oxford Road.

Figure 9: Approximate locations of amendments for Community Forum Area 15 - Greatworth to **Lower Boddington**

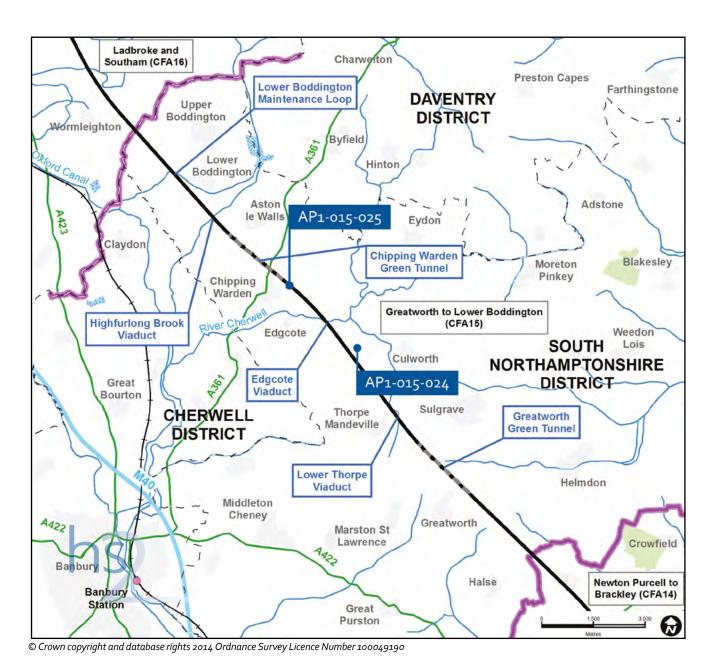


Table 8: Summary of amendments for Community Forum Area 15 - Greatworth to Lower Boddington

Amendment	Description of the original scheme	Description of the revised scheme
Revised access to Danes Moor auto-transformer station AP1-015-024	The Bill provides for the Danes Moor auto-transformer station and associated access track approximately 700m south of Welsh Road on the east side of the project. It also provides for the realignment of Bridleway AG10 across the bridge south of Welsh Road, approximately 5m above the existing ground level. This would also provide access to West Mill Farm and to the balancing ponds for project maintenance.	A new farm access for West Mill Farm has been constructed in close proximity to the proposed access. Using this new access will avoid taking land from agricultural use between the proposed and existing accesses. Part of the access needs to be improved and widened to make it suitable for maintenance vehicles. The revised access will be 3.5m wide and include passing bays. This o.2ha of additional land was outside the limits of the Bill.
Revision of bridleway and access provision at Chipping Warden AP1-015-025	The Bill provides for footpaths AE20 and AE12 to be restored over the tunnel at Chipping Warden, incorporating a new bridleway to maintain connectivity along Culworth Road for pedestrians, cyclists and horse riders. Access to Calves Close Spinney, which is the location for activities run by R.I.F.T Airsoft Ltd., would be maintained through the provision of a temporary and permanent access track during the construction and operation of the project.	The alignment of the private access to Calves Close Spinney over the tunnel has been redesigned to provide a gentler gradient so it will provide an accessible route for all users of the Culworth Road bridleway, including cyclists. The additional 500 square metres of land required for this revised alignment was outside the limits of the Bill. However, 0.2ha of land has been removed from the Bill as a result of this amendment.

Figure 10: Approximate locations of amendments for Community Forum Area 16 - Ladbroke and Southam

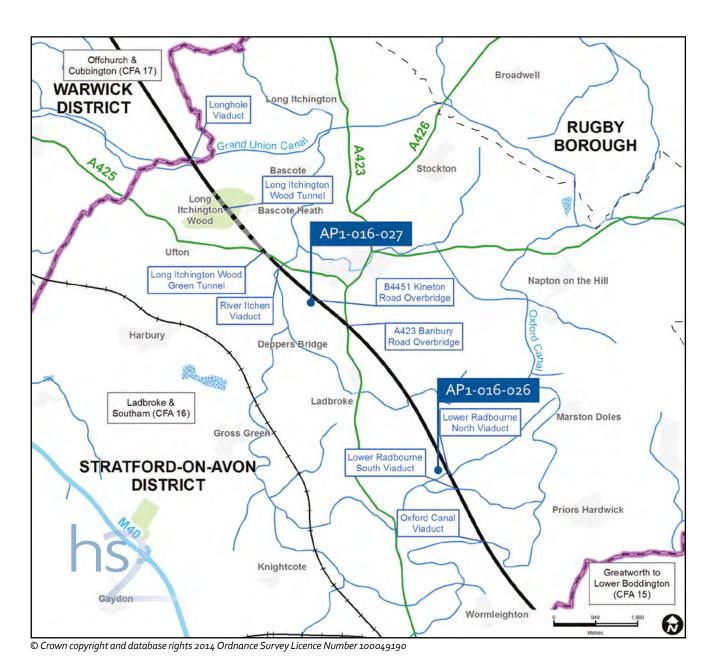


Table 9: Summary of amendments for Community Forum Area 16 - Ladbroke and Southam

Amendment	Description of the original scheme	Description of the revised scheme
Amendment to Radbourne Lane realignment	The Bill provides for the realignment of Radbourne Lane on the western side of the project.	The realignment of Radbourne Lane between Lower Radbourne north viaduct and Lower Radbourne Farm was omitted from the Bill plans.
AP1-016-026		The section of the existing alignment of Radbourne Lane between Lower Radbourne north viaduct and the balancing pond access track will need to be permanently closed and diverted onto the balancing pond access track. An additional area of land (approximately 240 square metres) is required to link the existing Radbourne Lane between Lower Radbourne Farm and the balancing pond access track. This land was outside the limits of the Bill.
B4451 Kineton Road to The Fields House access link AP1-016-027	The Bill provides for a temporary right of access along parts of the existing private access track from B4451 Kineton Road to The Fields House for construction traffic.	An additional 10m extension of access rights is required for construction traffic along this access track. The land required (approximately 25 square metres) for this extension was outside the original limits of the Bill. The land required for this extension will be used for construction traffic temporarily during the construction phase of the works, after which the track will revert to being a private access.

Figure 11: Approximate location of the amendment for Community Forum Area 17 - Offchurch and Cubbington

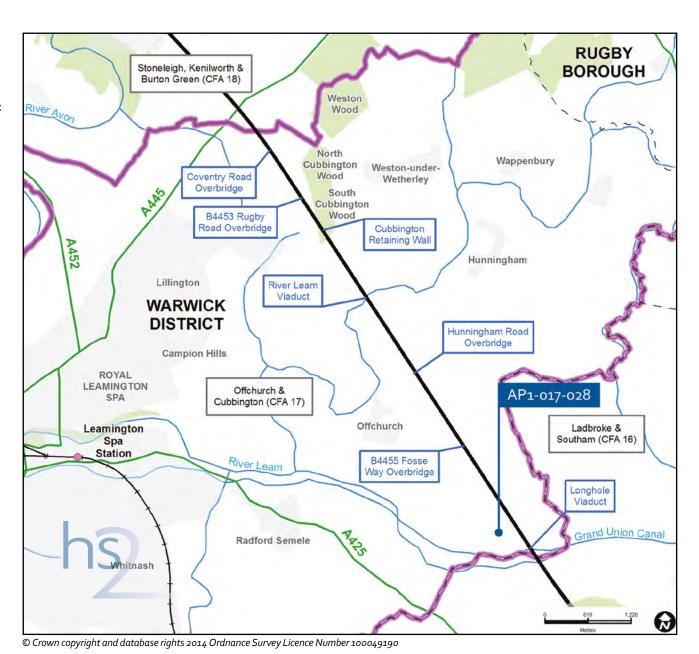
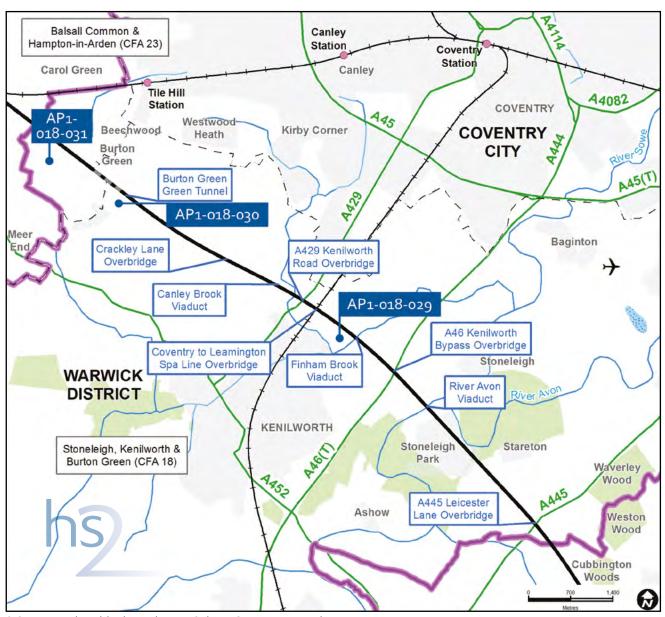


Table 10: Summary of the amendment for Community Forum Area 17 - Offchurch and Cubbington

Amendment	Description of the original scheme	Description of the revised scheme
Additional temporary land and permanent access rights at Burnt Heath Farm AP1-017-028	The Bill provides for the diversion of a high pressure gas main which crosses the project to allow construction to proceed safely.	An additional working area of 1.6ha is required temporarily at Burnt Heath Farm for sections of gas pipeline to be welded, tested and commissioned prior to installation to form the diversion. In addition, since submission of the Bill it has been identified that there is a need for a change to part of the route for the diversion of the high pressure gas main which was shown in the Bill, to remove the requirement for a 90 degree bend in the pipe. This revised diversion route would cross a small part of the temporary land required for the
		pipe working area, and a permanent right of access will be required over the new high pressure gas main route.

Figure 12: Approximate locations of amendments for Community Forum Area 18 - Stoneleigh, Kenilworth and Burton Green



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Table 11: Summary of amendments for Community Forum Area 18 - Stoneleigh, Kenilworth and Burton Green

Amendment Description of the original scheme		Description of the revised scheme	
Additional land to access replacement floodplain near Finham Brook	The Bill provides for a replacement floodplain area near to Finham Brook as part of the mitigation for the construction of Finham Brook viaduct.	An additional o.5ha of land, extending from land already identified for construction, is required for a temporary access track to enable construction of the replacement floodplain area. This additional land was outside the limits of the Bill.	
AP1-018-029 Additional land to facilitate pipeline diversion adjacent to Burton Green green tunnel AP1-018-030 The Bill provides for the diversion of a fuel pipeline which crosses the project to allow construction to proceed safely.		An additional working area is required temporarily between the land identified in the Bill and Red Lane and adjacent property boundaries, for sections of pipeline to be welded, tested and commissioned prior to installation of the diverted pipeline. The additional o.gha of land was outside the limits of the Bill. In addition, permanent rights of access will be required over the diverted pipeline to allow access for maintenance or in case of emergency.	
Temporary diversion of Kenilworth Greenway AP1-018-031	The Bill provides for a temporary diversion of Kenilworth Greenway through Little Beanit Farm during construction.	A revised route for the temporary diversion of Kenilworth Greenway has been identified to reduce disruption to agricultural operations at Little Beanit Farm during construction. The land required for this realigned temporary diversion (1.1ha) was outside the limits of the Bill.	

Figure 13: Approximate locations of amendments for Community Forum Area 19 - Coleshill Junction (and nearby amendments for Community Forum Area 20)

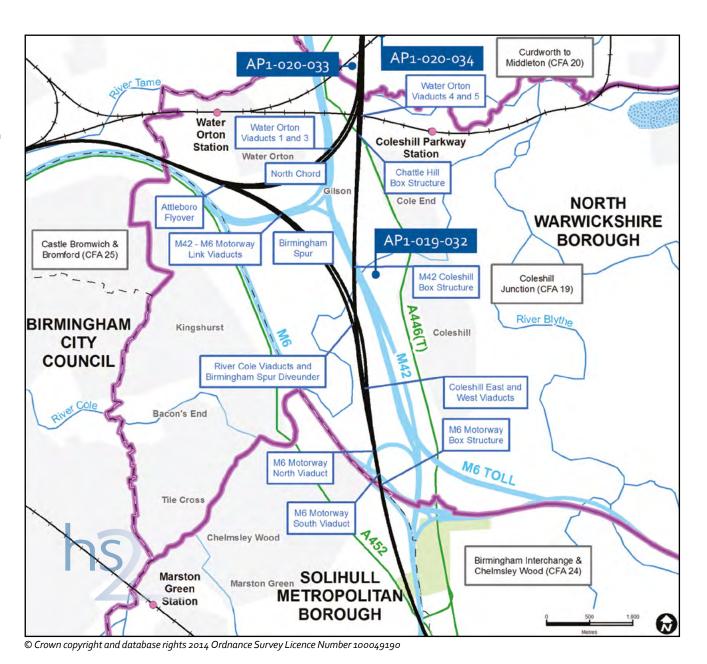


Table 12: Summary of the amendment for Community Forum Area 19 - Coleshill Junction

Amendment	Description of the original scheme	Description of the revised scheme
Additional land for winching and a fibre optic cable diversion near the M42 AP1-019-032	The Bill includes land for temporary access to pylons to enable the temporary diversion of fibre optic cables extending from 150m east of the M42 Coleshill north viaduct construction compound, south-eastwards across the River Cole and the M42, and then southeastwards alongside the M42.	An additional 8.9ha of land is temporarily required to create a corridor between the B4114 Birmingham Road and land to the south of the B117 Gilson Road for the fibre optic cable diversion. An area of 500 square metres is also required for winching works close to the B4114 Birmingham Road bridge. These areas of land were outside the limits of the Bill. Also, temporary rights are required to allow the erection of scaffolding to hold protective netting over the motorway during the fibre optic cable diversion works.

Figure 14: Approximate locations of amendments for Community Forum Area 20 - Curdworth to Middleton (and nearby amendment for Community Forum Area 21)

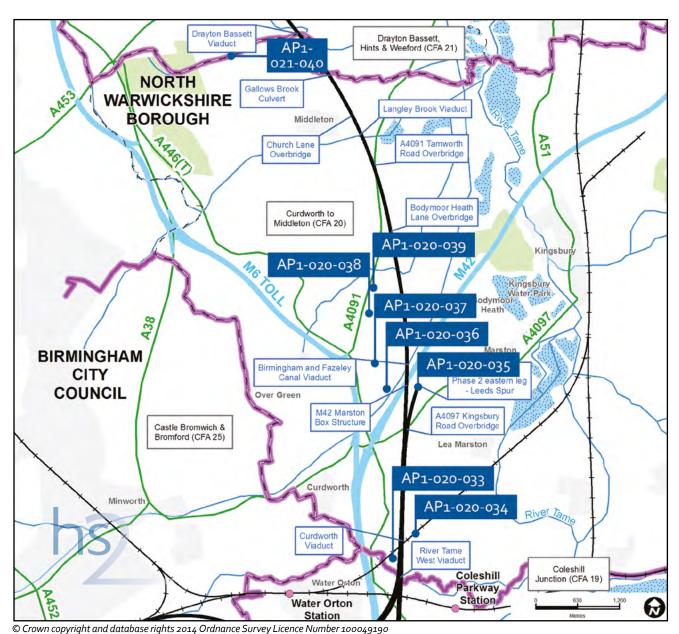


Table 13: Summary of amendments for Community Forum Area 20 - Curdworth to Middleton, continued on next page

Amendment	Description of the original scheme	Description of the revised scheme	
Additional land for protection of Birmingham and Derby Line near Lichfield Road/Faraday Road	The Bill includes land for the diversion of an overhead power line near Lichfield Road and Faraday Road.	Temporary scaffolding is required to provide protection to the Birmingham and Derby Line during overhead power line diversion works. The land (0.2ha) required for this scaffolding was outside the original limits of the Bill.	
AP1-020-033			
Temporary construction and permanent maintenance access to the Curdworth viaduct (central) satellite	The Bill provides for land for the Curdworth viaduct (central) construction compound adjacent to the Birmingham and Derby Line.	Access for construction traffic from Edison Road to the construction compound was not included in the Bill plans. This amendment is to provide temporary access rights over an existing private road for access to the Curdworth viaduct (central) construction compound, which is located adjacent to the Birmingham and Derby Line.	
compound, adjacent to the Birmingham and Derby Line		The amendment requires approximately 0.5ha of land that was outside the limits of the	
AP1-020-034		Bill. Permanent access rights for maintenance along this route have also now been added to the Bill plans.	
Land for woodland habitat creation west of Dunton Wood	The original scheme includes land for woodland habitat creation to the west of Dunton Wood Local Wildlife Site.	The full extent of the land identified for woodland habitat creation within the main Environmental Statement was not included in the Bill plans. Including the full extent of the habitat creation area has resulted in an additional 0.5ha of additional land being	
AP1-020-035		required, which was outside the limits of the Bill.	
Additional land for pipeline diversion works and access AP1-020-036	The Bill provides for temporary access and land for the permanent diversion of the Seisdon to Kingsbury pipeline. Byway 450 which runs along Marston Lane, will be temporarily diverted around the works.	Additional land is required temporarily during the pipeline diversion works. The additional 2.8ha of land will provide the working area for lengths of pipe to be welded, tested and commissioned prior to installation. This additional land was outside the limits of the Bill.	
Additional access rights between A4091 and Birmingham and Fazeley Canal AP1-020-037	The Bill provides for access rights along the access track between the A4091 Tamworth Road and the Birmingham and Fazeley Canal, to enable works to the overhead power line in this area, near Grange Farm Cottages.	The temporary access needs to be extended by approximately 100m to the east from the access track to join land already identified in the Bill and extended to the west in order to allow the access to continue to the A4091 Tamworth Road. The area required for this extension of the land was outside the limits of the Bill.	

Table 13: Summary of amendments for Community Forum Area 20 - Curdworth to Middleton, continued

Amendment	Description of the original scheme	Description of the revised scheme	
power line works adjacent to overhead power line near to Cuttle Mill Lane. Access		An additional o.gha of land is temporarily required for the winching of overhead power lines immediately adjacent to Cuttle Mill Lane. The land was outside the original limits of the Bill.	
Additional land for overhead power line works to the south-west of Middleton House Farm AP1-020-039	The Bill provides for access to pylons for overhead utility diversion works near the A4091 and Cuttle Mill Lane.	Additional land is temporarily needed between pylons to the south-west of Middleton House Farm for the diversion of a fibre optic cable. The proposed amendment extends from the pylon to the south of Cuttle Mill Lane, crossing the A4091 Tamworth Road, to the pylon south-west of Middleton House Farm. This additional land was outside the limits of the Bill.	



Figure 15: Approximate locations of amendments for Community Forum Area 21 - Drayton Bassett, Hints and Weeford

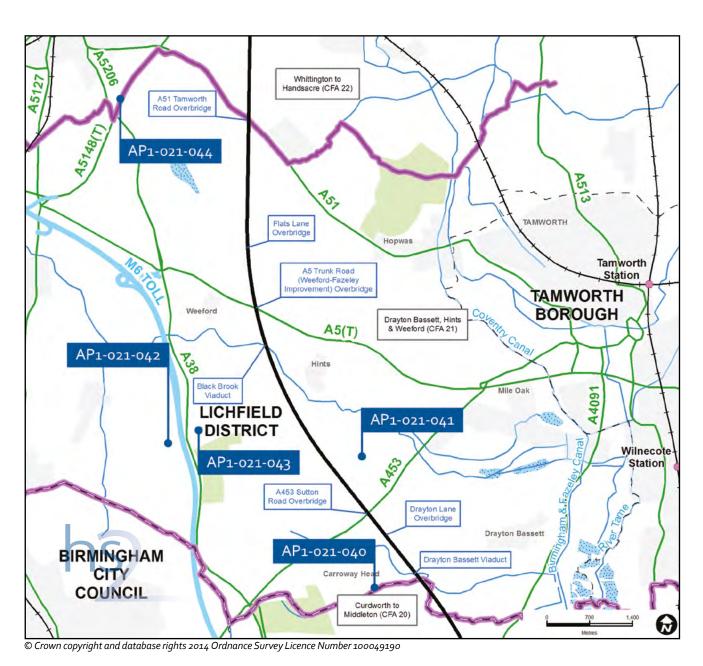
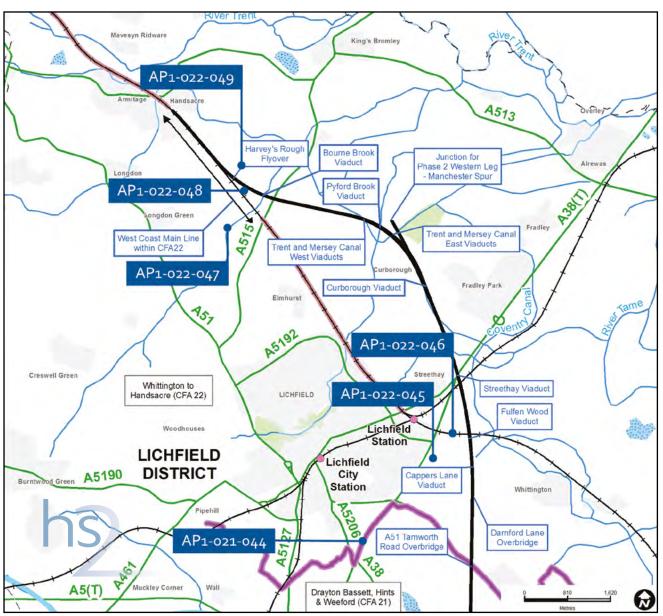


Table 14: Summary of amendments for Community Forum Area 21 - Drayton Bassett, Hints and Weeford

Amendment	Description of the original scheme	Description of the revised scheme	
Additional land between Drayton Lane and Coppice Lane	The Bill provides for overhead power line diversions in the area between Drayton Lane and Gallows Brook.	Temporary access via Upper House Farm to a pylon 100m west of the farm for earthing works was not included in the Bill plans, but was included in the main Environmental Statement.	
AP1-021-040		In addition, further land is temporarily required off Coppice Lane to allow earthing works to two pylons to the north and south of Coppice Lane, and land is required temporarily along the line of the pylons between Coppice Lane and Drayton Lane for a fibre optic cable diversion.	
		The additional 14.2ha of land that is required for these works was outside the limits of the Bill.	
Access for utility works along Bangley Lane AP1-021-041	The Bill provides for access along Bangley Lane off the A453 Sutton Road to allow construction vehicles to access the works to the overhead power line to the north-west and south-east of Bangley Lane.	An additional section of Bangley Lane is required to enable access from the A453 Sutton Road onto the lane. The o.4ha of land required for this revision was outside the limits of the Bill. Access is required both during construction and on completion of the works for ongoing maintenance.	
Access for utility works between Green Barns Lane and the gravel pits east of the M6 Toll AP1-021-042	Temporary diversion of overhead power lines finishing at the gravel pits east of the M6 Toll, including an area for winching.	Access to three pylons between the gravel pits east of the M6 Toll and Green Barns Lane were assessed in the main Environmental Statement but were omitted from the Bill plans. The land required has now been added to the Bill plans. One of the access track alignments that was assessed in the main Environmental Statement has been slightly realigned to use an existing track.	
Access and land required for utility works west of Brockhurst Lane AP1-021-043	Temporary diversion of overhead power lines terminating at the gravel pits east of the M6 Toll, including an area for winching.	An amended location for the temporary winching of overhead power lines is required, the amended location remains within the same gravel pits. Temporary access is required from the realigned winching site to the existing access track from the A ₃ 8 London Road.	
Access and land required for utility works near the junction of the A5148 and A38	The Bill provides for land for overhead power line diversion works near the roundabout junction of the A5148, the A38 and the A5026 to the south of	It has been identified that an additional area of land is required temporarily for scaffolding over the A5148 and A38 to protect the road during the diversions to the overhead power line.	
AP1-021-044	Lichfield.	In addition a new temporary access route is required off the A5206 London Road to reach the land required for construction.	
		The area of land required for this amendment is approximately 1.7ha. This additional area of land was outside the limits of the Bill.	

Figure 16: Approximate locations of amendments for Community Forum Area 22 - Whittington to Handsacre



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Table 15: Summary of amendments for Community Forum Area 22 - Whittington to Handsacre

Amendment	Description of the original scheme	Description of the revised scheme
Additional land and temporary rights required in the vicinity of Fulfen Farm AP1-022-045	Land is included within the Bill for overhead power line diversion works near A ₃ 8 Rykneld Street between Cappers Lane and Darnford Lane.	Additional land is required temporarily to enable scaffolding to be erected at Fulfen Farm to protect the property during the diversion works. In addition, temporary rights are required to allow for the potential swing of the diverted overhead power lines, partly over the properties at Fulfen Farm. The additional land temporarily required for this amendment is approximately 0.3ha. This land was outside the limits of the Bill.
Land temporarily required in vicinity of the West Coast Main Line AP1-022-046	Land is included within the Bill to enable construction adjacent to A38 Rykneld Street, Cappers Lane and the West Coast Main Line.	An area over the West Coast Main Line was not included in the Bill. This area is required temporarily to enable the erection of scaffolding and netting for the protection of the railway during overhead power line diversions. The additional land required is approximately 0.1ha and was outside the original limits of the Bill.
Additional land required, and removal of a similar area, near Hanch Reservoir AP1-022-047	Land is included within the Bill to the south-west of Hanch Reservoir, with an area of land partly within Lichfield Golf Course for overhead power line diversion and associated winching works.	Approximately o.1ha of additional land is required temporarily in order to undertake winching works. The additional land required is to the west of Hanch Reservoir and immediately north of the Lichfield Golf Club and lies immediately to the south of the land already included within the Bill. The additional land required was outside the limits of the Bill. Under this amendment o.3ha of land has been removed from the Bill as it is no longer required.
Additional land and temporary rights required in the vicinity of Hanch Hall Farm and Shaw Lane Farm AP1-022-048	Land is included within the Bill for overhead power line diversion works in the vicinity of Hanch Hall Farm and Shaw Lane Farm.	An additional o.4ha of land is required temporarily. The additional land will allow for the temporary erection of scaffolding to protect buildings within the farm during the works. Two areas have been identified where temporary rights are required to allow for the potential swing of overhead power lines during diversion, of which the southern area is partly over properties including Hanch Hall Farm. The additional land and the areas over which new rights are required were outside the limits of the Bill.
Additional land required northeast of Tuppenhurst Lane AP1-022-049	Land is included within the Bill for works to overhead power lines to the east of Shaw Lane.	An additional 2.1ha of land is required temporarily to the north of Shaw Lane Farm and Tuppenhurst Lane in order to provide access to the existing pylons and to ensure safe working areas for power line diversion works. The additional land required was outside the limits of the Bill.

Figure 17: Approximate locations of amendments for Community Forum Area 24 - Birmingham Interchange and Chelmsley Wood

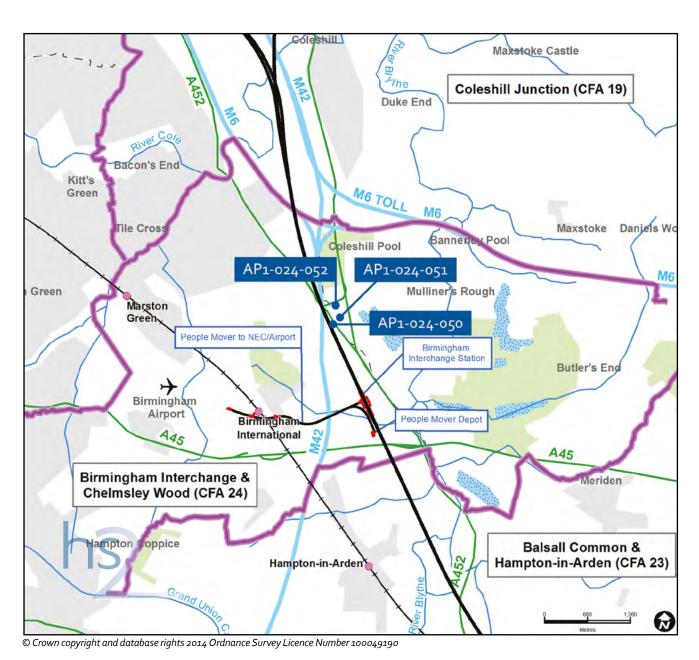
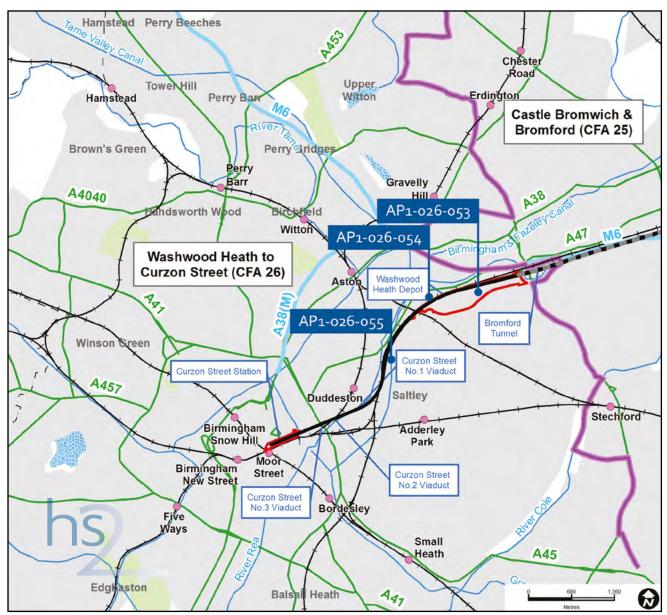


Table 16: Summary of amendments for Community Forum Area 24 - Birmingham Interchange and Chelmsley Wood

Amendment Description of the original scheme D		Description of the revised scheme	
Oversail rights at Common Farm, Bickenhill AP1-024-050	The Bill provides for a permanent realignment of an existing overhead power line located in close proximity to Quartz Point Business Park.	Rights to allow the potential swing of overhead power lines above the grounds of Common Farm (i.e. oversail) will be required temporarily for the realignment of the overhead power line and permanently for occasional future maintenance. The additional land over which rights are required was outside the limits of the Bill.	
Additional land at Melbicks Garden & Leisure Centre, Coleshill AP1-024-051	The Bill requires land at Melbicks Garden & Leisure Centre, both temporary, for the removal of an existing underground power line and permanently, for the occasional future maintenance of an overhead power line. In addition, provision is made for the permanent closure of the existing access off the A452 Chester Road and the provision of a replacement access off the A452/A446 roundabout. Part of the existing car park will also be required, which will result in the temporary and permanent loss of car parking spaces at Melbicks Garden & Leisure Centre.		
traffic route at Quartz Point Business Park, Coleshill ARa 22, 252 of an existing overhead power line, located in close proximity to Quartz Point Business Park. The Bill also provides for a construction traffic route from an		Temporary use of an existing access road to Quartz Point Business Park from the A446 Stonebridge Road is required to be used as a construction traffic route to realign the overhead power line. This construction route is in addition to the route from the A452 Kenilworth Road as stated in the original scheme. The additional construction traffic route was outside the limits of the Bill.	

Figure 18: Approximate locations of amendments for Community Forum Area 26 - Washwood Heath to Curzon Street



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Table 17: Summary of amendments for Community Forum Area 26 - Washwood Heath to Curzon Street

Amendment	Description of the original scheme	Description of the revised scheme	
Stopping up of Public Right of Way 18 (a footpath) runs from Common Lane, Washwood Heath AP1-026-053 Public Right of Way 18 (a footpath) runs from Common Lane to the A4040 Bromford Lane/A47 Heartlands Parkway roundabout and is currently inaccessible to the public where it runs through the former Washwood Heath railway works and the Ward End vehicle works, adjacent to the Birmingham and Derby Line.		The Bill has been amended to include the permanent closure (i.e. stopping up) of the majority of Public Right of Way 18. The alignment of Public Right of Way 18 has also been amended as the alignment shown previously was incorrect.	
Additional land for construction traffic routes near to the A47 Heartlands Parkway AP1-026-054	Construction routes are provided from a roundabout on the A47 Heartlands Parkway and from the disused Watson Road off the A47 between and to the sites of Vauxhall Lookers car showroom's car park and the Nechells gas holders. The route for construction vehicles would provide access to construct a new pumping station and undertake utility diversions to the west of the Birmingham and Derby Line.	Sections of the construction traffic routes are proposed on private roads. Rights for the temporary use of these private roads for construction traffic is required. It was previously assumed that these were public highways. The construction traffic routes on the private roads were outside the limits of the Bill.	
Stopping up of Hereford Square and demolition of a building, near Saltley High Street AP1-026-055	The Bill provides for the demolition of part of a building, which includes a car wash/car repair and a private hire car business and its servicing yard, to the west of Hereford Square.	The Bill incorrectly provided for only part of the demolition of the building and did not include the permanent closure of Hereford Square. This will also require additional land as potential working space for the demolition activities. The additional area required of approximately 480 square metres was outside the limits of the Bill.	



4. Assessing the environmental effects of the amendments within the Additional Provision

4.1 Scope of the assessment

A scoping exercise was undertaken by the technical specialists involved in the main Environmental Statement to determine whether each of the proposed amendments was considered to give rise to new or different likely significant environmental effects. The scoping exercise considered the construction and operational effects of the project for the following environmental topics:

- Agriculture, forestry and soils;
- Air quality;
- Climate (assessed at a route-wide level, rather than at the community forum area level);
- Community;
- Cultural heritage;
- Ecology;
- Land quality;
- Landscape and visual assessment;
- Socio-economics;

- Sound, noise and vibration;
- Traffic and transport;
- Waste and material resources (assessed at a route-wide level, rather than at the community forum area level); and
- Water resources and flood risk assessment.

Those amendments identified as having the potential to result in new or different significant environmental effects were subject to further assessment work.

The geographical scope of the proposed amendments and the programme and duration of each amendment are described in Volume 2 of the Additional Provision Environmental Statement.

4.2 Assessment methodology

The environmental impact assessment process for the Additional Provision Environmental Statement has, in the main, followed that which was used for the main Environmental Statement, as described in the Scope and Methodology Report, and its associated Addendum. However, where there are instances where the environmental impact assessment process for this Additional Provision Environmental Statement has not followed the same approach as the main Environmental Statement, this is described in more detail in Section 3 of Volume 1 of the Additional Provision Environmental Statement. This relates to the ecology and landscape and visual assessment.



5. Summary of residual environmental effects by community forum area

In most instances the environmental impact assessment process has identified that there are no new or different likely significant effects as a result of the amendments to the design of the project compared to those reported in the main Environmental Statement. This is to be expected, as the majority of changes are very minor in nature and often involve the relocation of existing works. In a small number of cases, new or different likely significant effects have been identified as a result of an amendment. Those which remain after mitigation has been put in place are referred to as 'residual effects'. In one case, a residual significant effect reported in the main Environmental Statement will now no longer occur, due to mitigation measures within the revised scheme

Table 18 provides a summary of the new or different residual significant environmental effects, as a result of the amendments to the design of the project within each of the community forum areas.

Whilst assessing the likely significant effects of the amendments, it was identified that some residual significant effects arising from the original scheme were not reported in the main Environmental Statement. These are also summarised in Table 18.

Table 18: Summary of residual significant effects by community forum area

CFA number	Amendment	Original scheme	Revised scheme	Likely residual significant effect
CFA 11	Additional land required for the A4010 Stoke Mandeville bypass to the south of Stoke Mandeville AP1-011-007	The Bill provides a bypass of Stoke Mandeville as part of the project.	It has been identified that a recently completed care home for the elderly (Fremantle Court Care Home) was not considered in the main Environmental Statement. The care home is located just off Risborough Road, close to where the bypass connects with the A4010 Risborough Road. The A4010 Risborough Road has been widened to allow a right hand turn into the care home. Therefore, the road layout of the proposed bypass has been amended to take this into account. Additional land is required for this amendment. The additional land was outside the limits of the Bill.	Effects arising during construction Fremantle Court Care Home is predicted to experience significant visual and noise effects arising from construction of the A4010 bridge and the Stoke Mandeville bypass for approximately two years and six months. Taken together, these visual and noise effects will result in a significant effect on the amenity of Fremantle Court Care Home. Effects arising from operation Fremantle Court Care Home is predicted to experience significant visual and noise effects from years 0 - 15 of operation. Taken together, these effects will result in a significant effect on the amenity of Fremantle Court Care Home. Mitigation and residual effects Fremantle Court Care Home will be subject to residual significant effects both during construction and operation of the project. H52 Ltd will identify reasonably practicable measures to mitigate these residual significant effects, including discretionary measures identified in the draft Code of Construction Practice. In doing so, H52 Ltd will engage with stakeholders to understand the operational requirements of the care home and the benefit of the mitigation measures. Landscape and visual Effects arising during construction The main Environmental Statement reported that views of works associated with the construction of the project will result in a moderate adverse effect on views from certain areas, which is considered significant. Fremantle Court Care Home will experience similar views and therefore will be subject to a significant effect. The amendment introduces further construction activities into the area, but they are not substantially different from the activities assessed in the main Environmental Statement and therefore the level of effect remains the same. Mitigation and residual effects As reported in the main Environmental Statement, the views of construction activities in this area cannot be practicably mitigated, resulting in a temporary residual significant effect during construction. Fremantle Court Care Home will also be subj

CFA number	Amendment	Original scheme	Revised scheme	Likely residual significant effect
CFA 11	Change to land required for reconfiguration of the roundabout junction of the proposed A4010 Stoke Mandeville bypass with B4443 Lower Road AP1-011-008	The Bill provides a bypass of Stoke Mandeville as part of the project. The bypass will tie in with the B4443 Lower Road, south of Aylesbury, with a new roundabout. The alignment and junction arrangement will require the demolition of an adjacent residential property: Elmfield, 30 Lower Road.	A new road layout has been developed to avoid the loss of Elmfield. This involves moving, to the south-west, the roundabout and a small section of the B4443 Lower Road on the approach the roundabout. An existing length of Lower Road that was due to be removed in the original scheme will be retained to maintain access to the adjacent properties. The additional o.8ha of land required for the new road layout is outside the limits of the Bill. However, an area of o.9ha of land included in the original scheme is no longer required for the revised scheme, resulting in an overall reduction of approximately o.1ha.	Effects arising during construction Construction activities associated with the proposed A4010 Stoke Mandeville bypass and associated roundabout will be clearly visible from Elmfield, a residential property (that as result of the amendment will no longer be demolished). This will result in a new significant effect on Elmfield. Mitigation and residual effects The views of the construction activities cannot be practicably mitigated. This will result in a temporary residual significant effect, for the duration of the construction period.
CFA 11	Additional land required for utility access at Standall's Farm AP1-011-009	The Bill provides a permanent 3.5m wide access track from Bishopstone Road to Standall's Farm along an existing access. At Standall's Farm there is provision for access through the farmyard for maintenance of a balancing pond and pumping station and around the periphery of the farm to the east, for access, linking to the existing tracks north and south of the farm.	The access track from Bishopstone Road to Standall's Farm will need to be temporarily widened to 5m, in order to accommodate vehicles accessing a pylon during construction of the project. The additional o.4ha of land required to temporarily widen the access track was outside the limits of the Bill. Following the works to the pylon, the width of this access track will be reduced to 3.5m to enable permanent access to the balancing pond and pumping station. The provision of land for access through the farmyard outlined in the original scheme is no longer required and this has been removed in the revised scheme.	Cultural Heritage Effects arising during construction Construction of the revised scheme will completely remove medieval ridge and furrow earthworks within the topsoil in this location. This will result in a new permanent significant adverse effect. Mitigation and residual effects Measures contained within the draft Code of Construction Practice will be applied to control the effects on the ridge and furrow. A programme of archaeological works will be prepared to investigate and record the ridge and furrow that will be permanently removed. However, the effect on the ridge and furrow cannot be mitigated, resulting in a permanent residual significant effect.

CFA number	Amendment	Original scheme	Revised scheme	Likely residual significant effect
CFA 12	Additional land to mitigate the impact on the Doddershall Deserted Medieval Village AP1-012-014	The Bill provided for an area of grassland habitat mitigation and a balancing pond within the boundary of Doddershall Deserted Medieval Village, on the western side of the project at Quainton.	It has been determined that the grassland habitat and balancing pond should be located in different areas to avoid the partial loss of Doddershall Deserted Medieval Village. The grassland habitat and balancing pond will be located to the north-west and south respectively of their original scheme locations. The revised location for the grassland habitat will require an additional 8.7ha of land, which was outside the limits of the Bill. The land previously required for the grassland habitat and balancing pond in Doddershall Deserted Medieval Village has been removed from the Bill.	Cultural heritage Effects arising during construction Under the amendment, the Doddershall Deserted Medieval Village earthworks immediately adjacent to the Grade II* listed Doddershall House will now no longer be removed. This will reduce the magnitude of the permanent adverse significant effect on the setting of the house, that was reported in the main environment statement. Nevertheless, the effect still remains significant. Mitigation and residual effects As reported in the main Environmental Statement, the residual significant effect still occurs upon the setting of Doddershall House; however, the magnitude of the effect has been reduced.
CFA 12	Land required for pylon works near Quainton AP1-012-015	The Bill provides for an auto-transformer feeder station near Quainton, and a new substation north of Edgcott Road, both on the eastern side of the route. This will allow for electricity to be supplied to the project.	It has been identified that an additional 11.4ha of land is required temporarily for reconductoring and earthing of the overhead power line from a pylon south of North Farm, to a pylon south of Pear Tree Farm. The additional land was outside the limits of the Bill.	Effects arising during construction Construction activities associated with the amendment will be visible from new residential properties on the eastern side of Grendon Underwood. The construction activities include erection of scaffolding and use of construction equipment around pylons. This will result in a significant effect during construction. Mitigation and residual effects The views of construction activities cannot be practicably mitigated. This will result in a temporary residual significant effect, for the duration of the construction period.

CFA number	Amendment	Original scheme	Revised scheme	Likely residual significant effect
CFA 13	Alternative maintenance and farm access for Cowley Farm AP1-013-018 and AP1-013 019	The Bill provides for access to Cowley Farm and to two balancing ponds for maintenance. The access would be from Bicester Road to the south, via Twyford Mill to Cowley Farm (via Restricted Byway PBI/5A bridge). The Bill also provides for the temporary diversion of Restricted Byway PBI/5A over Footpath PBI/5 bridge during construction.	The proposed access to Twyford Mill is of insufficient width and would need to be improved and widened to accommodate maintenance vehicles. An alternative access will therefore be provided from the north, from Perry Hill and through Cowley Farm via the existing farm access (Restricted Byway PBI/5). The access track will be improved and widened to 3.5m, with passing bays. The proposed bridge over Footpath PBI/5 will also be removed as it is no longer required. This has resulted in approximately 1.5ha of land being removed from the Bill. The removal of the bridge will require Footpath PBI/6 to be diverted south, under the Twyford viaduct and Footpath PBI/5 to be diverted north over the Restricted Byway PBI/5A bridge. These diversions were outside the limits of the Bill. In addition, the temporary diversion of Restricted Byway PBI/5A over the Footpath PBI/5 bridge has been removed from the Bill.	Cultural heritage Effects arising from operation Construction of the access track will completely remove any archaeological remains associated with the shrunken medieval village at Cowley Farm. This will result in a permanent significant adverse effect. Mitigation and residual effects Measures contained within the draft Code of Construction Practice will be applied to control the effects on the shrunken medieval village. A programme of archaeological works will be prepared to investigate and record the archaeological remains that will be permanently removed. However, the effect on the shrunken village cannot be mitigated, resulting in a permanent residual significant effect. Traffic and transport Effects arising from operation The amendment will require an additional permanent diversion of Public Right of Way PBI/5(F)/7, increasing travel distance for users by 330m. This will result in a new significant effect. Mitigation and residual effects There is no mitigation for this permanent diversion and therefore there will be a permanent significant residual effect during the operation of the project.
CFA 18	Land to access replacement floodplain near Finham Brook AP1-018-029	The Bill provides for a replacement floodplain area near to Finham Brook as part of the mitigation for the construction of Finham Brook viaduct.	It has been identified that an additional 0.5ha of land, extending from land already identified for construction, is required for a temporary access track to enable construction of the replacement floodplain area. This additional land was outside the limits of the Bill.	Agriculture, forestry and soils Effects arising during construction An area of land temporarily required at Millburn Grange during the construction of the project was reported in the main Environmental Statement. As a result of the amendment, the area of land will increase from 17.5ha to 18ha. The additional temporary loss of 0.5 ha will increase the magnitude of the significant effect that was reported in the main Environmental Statement. Mitigation and residual effects The temporary significant effect on Millburn Grange cannot be mitigated. The residual significant effect will therefore remain for the duration of construction. Following construction, the land will be restored to its former agricultural use, following the best practice guidance for handling soil as set out in the draft Code of Construction Practice. Therefore, it is predicted that there will be no permanent residual significant effects as a result of the amendment.

CFA number	Amendment	Original scheme	Revised scheme	Likely residual significant effect
CFA 18	Land to facilitate pipeline diversion adjacent to Burton Green Tunnel, near Hob Lane, Burton Green	The Bill provides for the diversion of a fuel pipeline which crosses the project to allow construction to proceed safely.	It has been identified that an additional working area is required temporarily between the land identified in the Bill and Red Lane and adjacent property boundaries, for sections of pipeline to be welded, tested and commissioned prior to installation of the diverted pipeline. An additional o.gha of land will be required which was outside the limits of the Bill. In addition, a permanent right of access will be required over the diverted pipeline to allow access for maintenance or in case of emergency.	Traffic and transport Effects arising during construction Construction vehicles will access a worksite associated with the pipeline diversion works using Red Lane, which currently experiences a low volume of traffic. As a worst case it has been assumed that the construction vehicles during the peak of construction would lead to an increase in traffic flows of 60%, resulting in a significant effect. This effect was not reported in the main Environmental Statement and is corrected in this assessment. There are no new or different significant effects as a result of the amendment. Mitigation and residual effects There is no mitigation for this significant effect and therefore there will be a temporary residual significant effect during construction.
CFA 20	Additional land for pipeline diversion works and access AP1-020-036	The Bill provides for temporary access and land for the permanent diversion of the Seisdon to Kingsbury pipeline. Byway 450, which runs along Marston Lane, will be temporarily diverted around the works.	It has been identified that additional land is required temporarily during the pipeline diversion works. The additional 2.8ha of land will provide the working area for lengths of pipe to be welded, tested and commissioned prior to installation. This additional land was outside the limits of the Bill.	Agriculture, forestry and soils Effects arising during construction Approximately 1.6ha of land will be required for construction on The Bank, Mullensgrove Farm. The northern part of the affected parcel of land at the farm will also potentially be severed (cut off) by construction activity, but will be accessible from Marston Lane. This will result in a temporary significant adverse effect during construction. Mitigation and residual effects The effect on The Bank, Mullensgrove Farm cannot be mitigated. This will result in a temporary residual effect for the duration of the construction. Following construction the land will be restored to its former agricultural use, following the best practice guidance for handling soil as set out in the draft Code of Construction Practice. Therefore, it is predicted that there will be no permanent residual significant effects as a result of this amendment.

CFA number	Amendment	Original scheme	Revised scheme	Likely residual significant effect
CFA 20 (and 21)	Additional land between Drayton Lane and Coppice Lane AP1-021-040	The Bill provides for overhead power line diversions in the area between Drayton Lane and Gallows Brook.	It has been identified that temporary access via Upper House Farm to a pylon 100m west of the farm for earthing works was not included in the Bill plans, but was included in the main Environmental Statement. In addition, further land is temporarily required off Coppice Lane to allow earthing works to two pylons to the north and south of Coppice Lane, and land is required temporarily along the line of the pylons between Coppice Lane and Drayton Lane for a fibre optic cable diversion. The additional 14.2ha of land that is required for these works was outside the limits of the Bill.	Agriculture, forestry and soils Effects arising during construction The amount of land required at Shirrall Hall Farm has increased from 1.1ha (which was required for the original scheme and reported in the main Environmental Statement) to 2.3ha as a result of this amendment. The additional temporary loss of land will increase the magnitude of the effect that was reported in the main Environmental Statement, to a level that is now significant. Mitigation and residual effects This temporary significant effect on Shirrall Hall Farm cannot be mitigated. This will result in a temporary residual significant effect for the duration of construction. Following construction, the land will be restored to its former agricultural use, following the best practice guidance for handling soil as set out in the draft Code of Construction Practice. Therefore, it is predicted that there will be no permanent residual significant effects as a result of this amendment.
CFA 22	Additional land and temporary rights required in the vicinity of Fulfen Farm AP1-022-045	Land is included within the Bill for overhead power line diversion works near A ₃ 8 Rykneld Street between Cappers Lane and Darnford Lane.	It has been identified that additional land is required temporarily to enable scaffolding to be erected at Fulfen Farm to protect the property during the diversion works. In addition, temporary rights are required to allow for the potential swing of the diverted overhead power line partly over the properties at Fulfen Farm. The additional land temporarily required for this amendment is approximately 0.3ha. This land was outside the limits of the Bill.	Effects arising during construction As reported in the main Environmental Statement, construction work associated with the original scheme would have had no impact on the archaeological remains of medieval Fulfen (WHA307). The amendment may require ground disturbance within the boundaries of medieval Fulfen (WHA307) as a result of topsoil removal or earthworks to create a level platform for scaffolding. This may result in the loss of archaeological remains of moderate value, leading to a new significant effect. Mitigation and residual effects Further mitigation through design could include the potential for creating a level platform for scaffolding which will not require ground disturbance, thereby preserving the buried archaeological deposits. For the purposes of the assessment a reasonable worst case is assumed where this mitigation cannot be incorporated. As a result it has been assumed that the significant effect on potential archaeological remains associated with medieval Fulfen (WHA307) cannot be mitigated. This will result in a new residual significant effect.

CFA number	Amendment	Original scheme	Revised scheme	Likely residual significant effect
CFA 24	Additional land at Melbicks Garden & Leisure Centre, Coleshill AP1-024-051	The Bill requires land at Melbicks Garden & Leisure Centre, both temporarily, for the removal of an existing underground power line and permanently, for the occasional future maintenance of a overhead power line. In addition, provision is made for the permanent closure of the existing access off the A452 Chester Road and the provision of a replacement access off the A452/A446 roundabout. Part of the existing car park will also be required, which will result in the temporary and permanent loss of car parking spaces at Melbicks Garden & Leisure Centre.	It has been identified that an additional 2.4ha of land is temporarily required adjacent to Melbicks Garden & Leisure Centre to provide car parking spaces to mitigate the temporary and permanent loss of car parking spaces. The existing car park is to be additionally included in the land to be temporarily required, to allow for any reconfiguration which may be required. The additional land required was outside the limits of the Bill.	Traffic and transport Effects arising during construction The original scheme included the permanent loss of 54 car parking spaces at Melbicks Garden & Leisure Centre. This loss was reported in the main Environmental Statement. However, this amendment is to provide replacement car parking that will fully mitigate the loss of the 54 car parking spaces during construction and will therefore remove the temporary residual significant effect during construction that was reported in the main Environmental Statement. Mitigation and residual effects The revised scheme will remove the temporary residual significant effect that was reported in the main Environmental Statement, by providing replacement car parking during construction.



6. Route-wide effects

The main Environmental Statement presented an assessment of the likely significant environmental effects of the project that were considered at a geographical scale greater than the community forum area level (e.g. the effect of the project on the Chilterns Area of Outstanding Natural Beauty).

The amendments proposed as part of the Additional Provision will not give rise to any new or different residual significant effects at a route-wide level. Further information can be found in Volume 3 of this Additional Provision Environmental Statement.



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