



Telford & Wrekin
Co-operative Council

Protect, care and invest
to create a better borough

TravelTelford



Telford & Wrekin Transport Plan

ISA Appendices Volume 3
2027-2041

Draft for consultation



Contents

Appendix F. Delivery Plan Option Assessments	3
F.1 Non-location Assessments	3
ISA Objective 1 – Protect and improve air quality	4
ISA Objective 2 - Reduce the impact on environmental noise from transportation sources	7
ISA Objective 3 - Reduce carbon emissions from transport and contribute to meeting Telford and Wrekin’s goal of carbon neutral by 2030	10
ISA Objective 4 - Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding	13
ISA Objective 5 - Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	16
ISA Objective 6 - Protect and enhance sites designated for their international importance for nature conservation purposes (linked to HRA)	19
ISA Objective 7 - Protect, enhance and promote geodiversity	23
ISA Objective 8 - Protect and enhance cultural heritage assets and their settings, and the wider historic environment	25
ISA Objective 9 - Conserve and enhance the natural beauty of Telford and Wrekin’s protected landscapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity	28
ISA Objective 10 - Protect and enhance the water environment	31
ISA Objective 11 - Protect soil resources and avoid land contamination	34
ISA Objective 12 - Promote sustainable use of resources and natural assets	37
ISA Objective 13 - Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all	39
ISA Objective 14 - Support the wider coordination of land use and energy planning across Telford and Wrekin	42
ISA Objective 15 - Improve health and well-being for all citizens and reduce inequalities in health (HIA specific objective)	44
ISA Objective 16 - Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (EqIA specific objective)	47
ISA Objective 17 - Promote fairness and equity in rural connectivity (Rural proofing specific objective)	49
F.2 Locational Assessments	52
Telford Central - Ramp Access	53
Railway Station Upgrades	57
Hollinswood Interchange Improvements	60

Apley Roundabout	64
Haybridge Roundabout.....	68
A518 Corridor Improvement Scheme	72
A442 Northern Arc Capacity Improvement Scheme - Trench Lock Interchange	76
A442 Northern Arc Capacity Improvement Scheme - Hadley Park Roundabout and Yew Tree Junction	80
A5 Watling Street Corridor Improvements	84
LCWIP schemes	88
Ironbridge Park & Ride	92

Appendix F. Delivery Plan Option Assessments

F.1 Non-location Assessments

ISA Objective 1 – Protect and improve air quality

Intervention/ Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on Air Quality	
Employment Centre Connectivity Package	Construction Carriageway and footway works have the potential to give rise to adverse effects on air quality during construction. Construction plant and machinery may introduce air pollution and activities give rise to dust emissions. Such effects may disproportionately impact on vulnerable groups such as children and elderly and those who live in more deprived areas, where air quality tends to be worse. The potential for significant adverse effects without further project level assessment cannot be ruled out at this stage. Operation Improved connectivity may lead to adverse effects on air quality during operation. Carriageway improvements can lead to reduced congestion or a change in traffic patterns, through removal of pinch points, junction improvements etc. This would lead to a decrease in emissions, though this can be offset by an increase in vehicle kilometres as a greater volume of traffic may be attracted to the improved area. Where footway improvements act to encourage a modal shift away from private vehicles and towards active travel would be anticipated to reduce air quality pressures.	Design - Consideration of the impact of the scheme on Air Quality Management Areas (AQMAs). - Identify the potential for schemes that may have a beneficial impact on AQMAs Construction - Consideration of air quality in Construction Environmental Management Plans (CEMPs). - Use of best practice construction techniques to minimise the impact on air quality, e.g. ensuring all plant and machinery are well maintained and not emitting excessive fumes. Use of zero emitting or low emitting vehicles/plant. - Consultation with operators of facilities used by vulnerable groups such as schools, hospitals and care homes. Operation - Management of vehicle speed - Encourage use of Low Emission Vehicles	--	++
T&W LEVI Project	Construction There may be some air quality emissions associated with the construction of EV charge points but this is not anticipated to be significant.	Construction Consideration of air quality in CEMPs.	-	++

	Operation EV charge points would support uptake of low and zero emitting vehicles and therefore act to reduce air quality pressures.	Use of best practice construction techniques to minimise the impact on air quality, e.g. ensuring all plant and machinery are well maintained and not emitting excessive fumes		
		Operation None identified		
Traffic Signals Improvement Scheme	Construction There may be some air quality emissions associated with the construction involved in installing or renewing traffic signals or crossings but this is not anticipated to be significant. Operation Improvements to traffic signals may improve network efficiency, reducing congestion which would reduce air quality pressures, although benefits are not anticipated to be significant.	Construction - Consideration of air quality in CEMPs. - Use of best practice construction techniques to minimise the impact on air quality, e.g. ensuring all plant and machinery are well maintained and not emitting excessive fumes Operation - None identified	-	+
Safety Schemes	Construction There may be some air quality emissions associated with the construction involved in traffic management interventions, but this is not anticipated to be significant. Operation The scheme is not anticipated to impact on air quality during operation.	Construction - Consideration of air quality in CEMPs. - Use of best practice construction techniques to minimise the impact on air quality, e.g. ensuring all plant and machinery are well maintained and not emitting excessive fumes Operation - None identified	-	0
Electric Bus	Construction No construction is anticipated for this intervention. Operation Moving away from traditional fuelled buses to low and zero emitting vehicles is expected to reduce air quality pressures.	Construction - None identified Operation - None identified	0	++
Maintenance Works:	Construction	Design	--	+

• A442 Queensway Upgrades • Footpath Maintenance • Street Lighting Maintenance • Drainage Maintenance • Street Furniture • Road Markings • Structure Maintenance • Carriageway Maintenance	Repair and renewal of infrastructure such as footways, structures and carriageways may give rise to adverse effects on air quality during construction. Construction plant and machinery may introduce air pollution and activities give rise to dust emissions. Such effects may disproportionately impact on vulnerable groups such as children and elderly and those who live in more deprived areas, where air quality tends to be worse. The potential for significant adverse effects without further project level assessment cannot be ruled out at this stage. Operation If maintenance works enhance efficiency or encourage travel by active modes there may be some benefits in terms of air quality, although these are not expected to be significant.	• Consideration of the impact of the scheme on Air Quality Management Areas (AQMAs). • Identify the potential for schemes that may have a beneficial impact on AQMAs Construction • Consideration of air quality in Construction Environmental Management Plans (CEMPs). • Use of best practice construction techniques to minimise the impact on air quality, e.g. ensuring all plant and machinery are well maintained and not emitting excessive fumes. Use of zero emitting or low emitting vehicles/plant. • Consultation with operators of facilities used by vulnerable groups such as schools, hospitals and care homes. Operation • None identified		
Bus Improvements: • Tender costs of services 99 to 104 • Demand Response Transport scheme • Bus Shelter Improvement Scheme	Construction Infrastructure works or improvements to bus shelters may give rise to adverse effects on air quality during construction. Construction plant and machinery may introduce air pollution and activities give rise to dust emissions. The potential for significant adverse effects without further project level assessment cannot be ruled out at this stage. Operation If works improve the accessibility of bus services and encourage travel by public transport there may be benefits in terms of air quality.	Construction • Consideration of air quality in CEMPs. • Use of best practice construction techniques to minimise the impact on air quality, e.g. ensuring all plant and machinery are well maintained and not emitting excessive fumes. Use of zero emitting or low emitting vehicles/plant. Operation • None identified	--	++

- Bus service infrastructure civils works

ISA Objective 2 - Reduce the impact on environmental noise from transportation sources

Intervention/ Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on Environmental Noise	
Employment Centre Connectivity Package	Construction Carriageway and footway works have the potential to give rise to adverse effects noise pollution during construction. Construction plant and machinery may introduce new noise sources. Such effects may disproportionately impact on vulnerable groups such as children and elderly. The potential for significant adverse effects without further project level assessment cannot be ruled out at this stage. Operation Improved connectivity may lead to adverse effects on noise during operation if the use of private vehicles increases. Carriageway improvements can lead to reduced congestion or a change in traffic patterns, through removal of pinch points, junction improvements etc. This would lead to a decrease in noise pollution, though greater volumes of traffic may be attracted to the improved route. Where footway improvements act to encourage a modal shift away from private vehicles and towards active travel would be anticipated to reduce noise pollution.	Design • Integrate noise suppression/barriers where appropriate Construction • Methods to reduce noise during construction, e.g. use of electric vehicle/plant. • Consideration of noise in Construction Environmental Management Plans (CEMPs) • Use of construction noise barriers Operation • Management of vehicle speed • Encourage use of Low Emission Vehicles	--	++

T&W LEVI Project	Construction There may be some noise pollution associated with the construction of EV charge points but this is not anticipated to be significant. Operation EV charge points would support uptake of low and zero emitting vehicles and therefore act to reduce noise pollution.	Construction • Methods to reduce noise during construction, e.g. use of electric vehicle/plant. • Consideration of noise in CEMPs • Use of construction noise barriers Operation • None identified	-	++
Traffic Signals Improvement Scheme	Construction There may be some noise pollution associated with the construction involved in installing or renewing traffic signals or crossings but this is not anticipated to be significant. Operation Improvements to traffic signals may improve network efficiency, reducing congestion which would reduce noise pollution, although benefits are not anticipated to be significant.	Construction • Methods to reduce noise during construction, e.g. use of electric vehicle/plant. • Consideration of noise in CEMPs • Use of construction noise barriers Operation • None identified	-	+
Safety Schemes	Construction There may be noise pollution associated with the construction involved in traffic management interventions but this is not anticipated to be significant. Operation The scheme is not anticipated to impact on noise pollution during operation.	Construction • Methods to reduce noise during construction, e.g. use of electric vehicle/plant. • Consideration of noise in CEMPs • Use of construction noise barriers Operation • None identified	-	0
Electric Bus	Construction No construction is anticipated for this intervention. Operation Moving away from traditional diesel buses to low and zero emitting vehicles is expected to reduce noise pollution.	Construction • None identified Operation • None identified	0	++

Maintenance Works: • A442 Queensway Upgrades • Footpath Maintenance • Street Lighting Maintenance • Drainage Maintenance • Street Furniture • Road Markings • Structure Maintenance • Carriageway Maintenance	Construction Repair and renewal of infrastructure such as footways, structures and carriageways may give rise to adverse effects in terms of noise pollution during construction. Construction plant and machinery may introduce new noise sources. The potential for significant adverse effects without further project level assessment cannot be ruled out at this stage. Operation If maintenance works enhance efficiency or encourage travel by active modes there may be some benefits in terms of noise pollution, although these are not expected to be significant.	Construction • Methods to reduce noise during construction, e.g. use of electric vehicle/plant. • Consideration of noise in Construction Environmental Management Plans (CEMPs) • Use of construction noise barriers Operation • None identified	--	+
Bus Improvements: • Tender costs of services 99 to 104 • Demand Response Transport scheme • Bus Shelter Improvement Scheme • Bus service infrastructure civils works	Construction Infrastructure works or improvements to bus shelters may give rise to adverse effects in terms of noise pollution during construction. Construction plant and machinery may introduce new noise sources. The potential for significant adverse effects without further project level assessment cannot be ruled out at this stage. Operation If works improve the accessibility of bus services and encourage travel by public transport there may be benefits in terms of noise pollution.	Construction • Methods to reduce noise during construction, e.g. use of electric vehicle/plant. • Consideration of noise in Construction Environmental Management Plans (CEMPs) • Use of construction noise barriers Operation • None identified	--	++

ISA Objective 3 - Reduce carbon emissions from transport and contribute to meeting Telford and Wrekin's goal of carbon neutral by 2030

Intervention/ Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on Carbon Emissions	
Employment Centre Connectivity Package	Construction Carriageway and footway works have the potential to give rise to carbon emissions during construction. Construction plant and machinery as well as embodied carbon in construction materials are associated with adverse effects. The potential for significant adverse effects without further project level assessment cannot be ruled out at this stage. Operation Improved connectivity may lead to an increase in carbon emissions during operation if private vehicle use increases. Carriageway improvements can lead to reduced congestion or a change in traffic patterns, through removal of pinch points, junction improvements etc. This would lead to a decrease in emissions, though this can be offset by an increase in vehicle kilometres as a greater volume of traffic may be attracted to the improved area. Where footway improvements act to encourage a modal shift away from private vehicles and towards active travel would be anticipated to reduce carbon emissions.	Design - Consideration of carbon emissions, including embodied carbon in design. Construction - Consideration of carbon emissions in CEMPs. - Use of best practice construction techniques to minimise carbon emissions. Use of zero emitting or low emitting vehicles/plant. - Use of local sources for materials Operation - Encourage use of Low Emission Vehicles	-- +	
T&W LEVI Project	Construction There may be some carbon emissions associated with the construction of EV charge points but this is not anticipated to be significant. Operation	Construction - Consideration of carbon emissions in CEMPs. - Use of best practice construction techniques to minimise carbon	- +	

	EV charge points would support uptake of low and zero emitting vehicles and therefore act to reduce carbon emissions. However, the extent of emissions reductions will depend on wider factors influencing EV uptake.	emissions. Use of zero emitting or low emitting vehicles/plant. • Use of local sources for materials Operation • None identified		
Traffic Signals Improvement Scheme	Construction There may be some carbon emissions associated with the construction involved in installing or renewing traffic signals or crossings but this is not anticipated to be significant. Operation Improvements to traffic signals may improve network efficiency, reducing congestion which would reduce carbon emissions, although benefits are not anticipated to be significant.	Construction • Consideration of carbon emissions in CEMPs. • Use of best practice construction techniques to minimise carbon emissions Use of zero emitting or low emitting vehicles/plant. • Use of local sources for materials Operation • None identified	-	+
Safety Schemes	Construction There may be some carbon emissions associated with the construction involved in traffic management interventions but this is not anticipated to be significant. Operation The scheme is not anticipated to impact on carbon emissions during operation.	Construction • Consideration of carbon emissions in CEMPs. • Use of best practice construction techniques to minimise carbon emissions Use of zero emitting or low emitting vehicles/plant. • Use of local sources for materials Operation • None identified	-	0
Electric Bus	Construction No construction is anticipated for this intervention. Operation Moving away from traditional diesel buses to low and zero emitting vehicles can help reduce carbon emissions. However, the overall benefit depends on wider uptake and decarbonisation measures.	Construction • None identified Operation • None identified	0	+
Maintenance Works:	Construction	Construction	--	+

• A442 Queensway Upgrades • Footpath Maintenance • Street Lighting Maintenance • Drainage Maintenance • Street Furniture • Road Markings • Structure Maintenance • Carriageway Maintenance	Repair and renewal of infrastructure such as footways, structures and carriageways may give rise carbon emissions during construction. Construction plant and machinery as well as embodied carbon in construction materials are associated with adverse effects. The potential for significant adverse effects without further project level assessment cannot be ruled out at this stage Operation If maintenance works enhance efficiency or encourage travel by active modes there may be some benefits in terms of carbon emissions, although these are not expected to be significant.	• Consideration of carbon emissions in CEMPs. • Use of best practice construction techniques to minimise carbon emissions Use of zero emitting or low emitting vehicles/plant. • Use of local sources for materials Operation • None identified		
Bus Improvements: • Tender costs of services 99 to 104 • Demand Response Transport scheme • Bus Shelter Improvement Scheme • Bus service infrastructure civils works	Construction Infrastructure works or improvements to bus shelters may give rise to carbon emissions during construction. Construction plant and machinery as well as embodied carbon in construction materials are associated with adverse effects. The potential for significant adverse effects without further project level assessment cannot be ruled out at this stage Operation If works improve the accessibility of bus services and encourage travel by public transport there may be benefits in terms of carbon emissions. However, public transport improvements delivered in isolation are unlikely to achieve significant mode shift from private vehicles, meaning carbon benefits are likely to be slight.	Construction • Consideration of carbon emissions in CEMPs. • Use of best practice construction techniques to minimise carbon emissions Use of zero emitting or low emitting vehicles/plant. • Use of local sources for materials Operation • None identified	--	+

ISA Objective 4 - Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding

Intervention/ Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on flood risk and resilience to climate change effects	
Employment Centre Connectivity Package	Construction Carriageway and footway works have the potential to lead to an increase in impermeable area during construction and therefore may contribute to increased flood risk by increasing runoff to nearby watercourses. The potential for significant adverse effects without further project level assessment cannot be ruled out at this stage. Operation Carriageway and footway works have the potential to lead to an increase in impermeable area during operation and therefore may contribute to increased flood risk by increasing runoff to nearby watercourses. The potential for significant adverse effects without further project level assessment cannot be ruled out at this stage. There may be potential to integrate adaptation and resilience measures and therefore be at reduced risk of flooding.	Design • Avoid flood areas if possible • Design to consider flood protection measures, flow routes and flood storage capacity Construction • Consideration of storm water runoff and dewatering operations in Construction Environmental Management Plans (CEMPs). • Use of best practice construction techniques to minimise the impact on flooding, e.g. use of temporary SuDs features to control site runoff Operation • Use of SuDS (sized to allow for a changing climate)	--	+
T&W LEVI Project	Construction Due to the limited construction involved with the installation of charging points, adverse effects on resilience to climate change or flood risk are not anticipated. Operation	Construction • Consideration of storm water runoff and dewatering operations in CEMPs. • Use of best practice construction techniques to minimise the impact	0	0

	The scheme is not anticipated to impact on resilience to climate change or flood risk during operation.	on flooding, e.g. use of temporary SuDs features to control site runoff Operation • None identified		
Traffic Signals Improvement Scheme	Construction There is not anticipated to be an increase in impermeable area where traffic signals are installed on existing routes and there for no effects on resilience to climate change or flood risk are anticipated. Operation There is not anticipated to be an increase in impermeable area where traffic signals are installed on existing routes and therefore no effects on resilience to climate change or flood risk are anticipated.	Construction • Consideration of storm water runoff and dewatering operations in CEMPs. • Use of best practice construction techniques to minimise the impact on flooding, e.g. use of temporary SuDs features to control site runoff Operation • None identified	0	0
Safety Schemes	Construction There is not anticipated to be an increase in impermeable area where safety schemes improve existing routes and therefore no effects on resilience to climate change or flood risk are anticipated. Operation There is not anticipated to be an increase in impermeable area where safety schemes improve existing routes and therefore no effects on resilience to climate change or flood risk are anticipated.	Construction • Consideration of storm water runoff and dewatering operations in CEMPs. • Use of best practice construction techniques to minimise the impact on flooding, e.g. use of temporary SuDs features to control site runoff Operation • None identified	0	0
Electric Bus	Construction No construction is anticipated for this intervention. Operation There is not anticipated to be an increase in impermeable area and therefore no effects on resilience to climate change or flood risk are anticipated.	Construction • None identified Operation • None identified	0	0

Maintenance Works: • A442 Queensway Upgrades • Footpath Maintenance • Street Lighting Maintenance • Drainage Maintenance • Street Furniture • Road Markings • Structure Maintenance • Carriageway Maintenance	Construction There is not anticipated to be an increase in impermeable area where maintenance is to existing routes and infrastructure and therefore no effects on resilience to climate change or flood risk are anticipated Operation Where drainage maintenance improves the optimisation of drainage assets it may help to increase resilience to climate change, including flood risk.	Construction • None identified Operation • None identified	0	+
Bus Improvements: • Tender costs of services 99 to 104 • Demand Response Transport scheme • Bus Shelter Improvement Scheme • Bus service infrastructure civils works	Construction Bus service infrastructure works have the potential to lead to an increase in impermeable area during construction and therefore may contribute to increased flood risk by increasing runoff to nearby watercourses. The potential for significant adverse effects without further project level assessment cannot be ruled out at this stage. Operation Bus service infrastructure works have the potential to lead to an increase in impermeable area during operation and therefore may contribute to increased flood risk by increasing runoff to nearby watercourses. The potential for significant adverse effects without further project level assessment cannot be ruled out at this stage. There may be potential to integrate adaptation and resilience measures and therefore be at reduced risk of flooding.	Construction • Consideration of storm water runoff and dewatering operations in Construction Environmental Management Plans (CEMPs). • Use of best practice construction techniques to minimise the impact on flooding, e.g. use of temporary SuDs features to control site runoff Operation • Use of SuDS (sized to allow for a changing climate) is appropriate	--	-

ISA Objective 5 - Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network

Intervention/ Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on Biodiversity	
Employment Centre Connectivity Package	Construction Carriageway and footway works have the potential to result in direct loss of or encroachment onto habitat or the severance / fragmentation of green infrastructure, priority habitat or sites designated for biodiversity conservation. Indirect effects can also be experienced via construction noise and vibration. Operation Carriageway improvements may introduce pressures on ecologically sensitive sites such as air, noise, vibration issues and pollutant deposition. Operation of new infrastructure projects may increase risk of road kill etc. Conversely where footway works support a modal shift towards active travel may reduce pressures arising from private vehicles. New projects may incorporate biodiversity enhancements and active travel enhancements promote engagement with nature. The HRA concludes the scheme is unlikely to have an impact on European sites.	Design • Avoidance of designated sites • Consideration of the potential for ecological enhancement / Design to achieve Biodiversity Net Gain • Compensatory green infrastructure, including development of 'Green Streets' • Screening with native species • Development of wildflower meadows along route alignment or at junction islands, etc. • Scheme realignment, particularly if designated areas may be affected Construction • Consideration of the timing of construction works in relation to ecological windows and legislative requirements • Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs) • Appropriate management of invasive species where applicable Operation	--	++

		- Scheduled control of invasive species where necessary - Maintenance of BNG areas.		
T&W LEVI Project	Construction There may be some disturbance to biodiversity as a result of construction noise and vibration associated with the installation of EV charge points but this is not anticipated to be significant. Operation A shift towards electric and low emissions vehicles may reduce noise and vibration levels which would have beneficial effects on fauna. Pollutant deposition will also be reduced having a beneficial effect on biodiversity.	Construction - Consideration of biodiversity and designated sites and habitats in CEMPs. Operation - None identified	-	+
Traffic Signals Improvement Scheme	Construction There may be some disturbance to biodiversity as a result of construction noise and vibration associated with installation of or works to existing traffic signals but this is not anticipated to be significant. Loss of or encroachment on habitat is unlikely where traffic signal schemes are focused on existing routes. Operation Improvements to traffic signals may improve network efficiency, reducing congestion which would reduce pollutant deposition and have benefits on biodiversity, although effects are not anticipated to be significant.	Construction - Consideration of biodiversity and designated sites and habitats in CEMPs. Operation - None identified	-	+
Safety Schemes	Construction There may be some disturbance to biodiversity as a result of construction noise and vibration associated with safety schemes but this is not anticipated to be significant. Loss of or encroachment on habitat is unlikely where safety schemes are focused on existing routes.	Construction - Consideration of biodiversity and designated sites and habitats in CEMPs. Operation - None identified	-	0

	Operation The scheme is not anticipated to impact on biodiversity during operation.			
Electric Bus	Construction No construction is anticipated for this intervention. Operation Moving away from traditional diesel buses to low and zero emitting vehicles is expected to reduce pressures on biodiversity such as air or noise pollution.	Construction • None identified Operation • None identified	0	+
Maintenance Works: • A442 Queensway Upgrades • Footpath Maintenance • Street Lighting Maintenance • Drainage Maintenance • Street Furniture • Road Markings • Structure Maintenance • Carriageway Maintenance	Construction Maintenance works are unlikely to result in direct loss of or encroachment onto habitat or sites designated for biodiversity conservation where works are confined to existing infrastructure. Indirect effects can also be experienced via construction noise and vibration. Operation If maintenance works enhance efficiency or encourage travel by active modes there may be some benefits in terms of reduced disturbance for biodiversity from air and noise pollution, but effects are not expected to be significant.	Construction • Consideration of biodiversity and designated sites and habitats in CEMPs. Operation • None identified	-	+
Bus Improvements: • Tender costs of services 99 to 104 • Demand Response Transport scheme	Construction There is potential for loss of or encroachment on habitat where works may include carriageway widening for bus boarders. There may be some disturbance to biodiversity as a result of construction noise and vibration associated with installation of or works to existing traffic signals but this is not anticipated to be significant.	Construction • Consideration of the timing of construction works in relation to ecological windows and legislative requirements • Consideration of biodiversity and designated sites and habitats in CEMPs. Operation	--	+

- Bus Shelter Improvement Scheme - Bus service infrastructure civils works	Operation If works improve the accessibility of bus services and encourage travel by public transport there may be benefits in terms of reduced disturbance for biodiversity from air and noise pollution, but effects are not expected to be significant.	None identified	
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ISA Objective 6 - Protect and enhance sites designated for their international importance for nature conservation purposes (linked to HRA)

Intervention/ Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on Internationally Designated Sites	
Employment Centre Connectivity Package	Construction Carriageway and footway works have the potential to result in direct loss of or encroachment onto internationally designated sites. Indirect effects can also be experienced via construction noise and vibration. Operation Carriageway improvements may introduce pressures on ecologically sensitive sites such as air, noise, vibration issues and pollutant deposition. Operation of new infrastructure projects may increase risk of road kill etc. Conversely where footway works support a modal shift towards active travel may reduce pressures arising from private vehicles. New projects may incorporate biodiversity enhancements and active travel enhancements promote engagement with nature.	Design - Avoidance of designated sites - Consideration of the potential for ecological enhancement / Design to achieve Biodiversity Net Gain - Compensatory green infrastructure, including development of 'Green Streets' - Screening with native species - Development of wildflower meadows along route alignment or at junction islands, etc. - Scheme realignment, particularly if designated areas may be affected Construction - Consideration of the timing of construction works in relation to ecological windows and legislative requirements	--	++

	The HRA concludes that the scheme is unlikely to result in significant effects on any European site	• Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs) • Appropriate management of invasive species where applicable Operation • Scheduled control of invasive species where necessary • Maintenance of BNG areas.		
T&W LEVI Project	Construction There may be some disturbance to biodiversity and internationally designated sites as a result of construction noise and vibration associated with the installation of EV charge points but this is not anticipated to be significant. Operation A shift towards electric and low emissions vehicles may reduce noise and vibration levels which would have beneficial effects on fauna and internationally designates sites. Pollutant deposition will also be reduced having a beneficial effect on biodiversity. The HRA concludes that the scheme is unlikely to result in significant effects on any European site	Construction • Consideration of biodiversity and designated sites and habitats in CEMPs. Operation • None identified	-	+
Traffic Signals Improvement Scheme	Construction There may be some disturbance to biodiversity and internationally designated sites as a result of construction noise and vibration associated with installation of or works to existing traffic signals but this is not anticipated to be significant. Loss of or encroachment on internationally designated sites is unlikely where traffic signal schemes are focused on existing routes.	Construction • Consideration of biodiversity and designated sites and habitats in CEMPs. Operation • None identified	-	+

	Operation Improvements to traffic signals may improve network efficiency, reducing congestion which would reduce pollutant deposition and have benefits on biodiversity and internally designates sites, although effects are not anticipated to be significant. The HRA concludes that the scheme is unlikely to result in significant effects on any European site			
Safety Schemes	Construction There may be some disturbance to biodiversity and internationally designated sites as a result of construction noise and vibration associated with safety schemes but this is not anticipated to be significant. Loss of or encroachment on habitat is unlikely where safety schemes are focused on existing routes. Operation The scheme is not anticipated to impact on internationally designated sites during operation. The HRA concludes that the scheme is unlikely to result in significant effects on any European site	Construction - Consideration of biodiversity and designated sites and habitats in CEMPs. Operation - None identified	-	0
Electric Bus	Construction No construction is anticipated for this intervention. Operation Moving away from traditional diesel buses to low and zero emitting vehicles is expected to reduce pressures on internationally designated sites such as air or noise pollution. The HRA concludes that the scheme is unlikely to result in significant effects on any European site	Construction - None identified Operation - None identified	0	+
Maintenance Works: A442 Queensway Upgrades	Construction Maintenance works are unlikely to result in direct loss of or encroachment onto habitat or internationally designated where works are confined to existing	Construction Consideration of biodiversity and designated sites and habitats in CEMPs.	-	+

• Footpath Maintenance • Street Lighting Maintenance • Drainage Maintenance • Street Furniture • Road Markings • Structure Maintenance • Carriageway Maintenance	infrastructure. Indirect effects can also be experienced via construction noise and vibration. Operation If maintenance works enhance efficiency or encourage travel by active modes there may be some benefits in terms of reduced disturbance for internationally designated sites from air and noise pollution, but effects are not expected to be significant. The HRA concludes that the scheme is unlikely to result in significant effects on any European site	Operation • None identified		
Bus Improvements: • Tender costs of services 99 to 104 • Demand Response Transport scheme • Bus Shelter Improvement Scheme • Bus service infrastructure civils works	Construction There is potential for loss of or encroachment on internationally designated sites where works may include carriageway widening for bus boarders. There may be some disturbance to biodiversity as a result of construction noise and vibration associated with installation of or works to existing traffic signals but this is not anticipated to be significant. Operation If works improve the accessibility of bus services and encourage travel by public transport there may be benefits in terms of reduced disturbance for internationally designated sites from air and noise pollution, but effects are not expected to be significant. The HRA concludes that the scheme is unlikely to result in significant effects on any European site	Construction • Consideration of the timing of construction works in relation to ecological windows and legislative requirements • Consideration of biodiversity and designated sites and habitats in CEMPs. Operation • None identified	--	+

ISA Objective 7 - Protect, enhance and promote geodiversity

Intervention/ Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on Geodiversity	
Employment Centre Connectivity Package	Construction Carriageway and footway works have the potential to result in direct loss of or encroachment onto geodiversity sites. Indirect effects can also be experienced via noise, pollutant deposition etc. Operation While effects are unlikely to be significant during operation, indirect effects can be experienced via noise, pollutant deposition etc. where use of private vehicles is increased with improved connectivity.	Design - Avoidance of designated geodiversity sites - Consideration of the potential for geodiversity enhancement Construction - Consideration of geodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs) Operation - None identified	--	0
T&W LEVI Project	Construction Indirect effects may be experienced via noise, pollutant deposition etc. during the installation of EV charge points but this is not anticipated to be significant. Operation No effects expected on geodiversity due to the nature of the intervention.	Construction - Consideration of geodiversity and designated sites and habitats in CEMPs Operation - None identified	-	0
Traffic Signals Improvement Scheme	Construction Indirect effects may be experienced via noise, pollutant deposition etc. during the works involved in traffic signal improvements but this is not anticipated to be significant. Operation	Construction - Consideration of geodiversity and designated sites and habitats in CEMPs Operation - None identified	-	0

	No effects expected on geodiversity due to the nature of the intervention.			
Safety Schemes	Construction Indirect effects may be experienced via noise, pollutant deposition etc. during the works involved in safety schemes but this is not anticipated to be significant. Operation The schemes are not anticipated to impact on geodiversity during operation.	Construction - Consideration of geodiversity and designated sites and habitats in CEMPs Operation - None identified	-	0
Electric Bus	Construction No construction is anticipated for this intervention. Operation No effects expected on geodiversity due to the nature of the intervention.	Construction - None identified Operation - None identified	0	0
Maintenance Works: - A442 Queensway Upgrades - Footpath Maintenance - Street Lighting Maintenance - Drainage Maintenance - Street Furniture - Road Markings - Structure Maintenance - Carriageway Maintenance	Construction Maintenance works are unlikely to result in direct loss of or encroachment onto geodiversity sites where works are confined to existing infrastructure. Indirect effects may be experienced via construction noise and vibration. Operation No effects expected on geodiversity due to the nature of the intervention.	Construction - Consideration of geodiversity and designated sites and habitats in CEMPs Operation - None identified	-	0
Bus Improvements:	Construction There is potential for loss of or encroachment on geodiversity sites where works may include	Construction	--	0

• Tender costs of services 99 to 104 • Demand Response Transport scheme • Bus Shelter Improvement Scheme • Bus service infrastructure civils works	carriageway widening for bus boarders. Indirect effects may be experienced via construction noise and vibration associated with construction works but this is not anticipated to be significant. Operation No effects expected on geodiversity due to the nature of the intervention.	• Consideration of geodiversity and designated sites and habitats in CEMPs Operation • None identified	
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ISA Objective 8 - Protect and enhance cultural heritage assets and their settings, and the wider historic environment

Intervention/ Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on Cultural Heritage	
Employment Centre Connectivity Package	Construction Carriageway and footway works may have a detrimental effect on the character and setting of heritage assets and therefore impact on their quality and distinctiveness. Construction of infrastructure also has the potential for previously unknown heritage features to be disturbed or damaged. There is always a potential for unknown heritage features to be discovered or damaged during construction. Operation Carriageway and footway works may have a detrimental effect on the character and setting of heritage assets and therefore impact on their quality and distinctiveness. However, improved connectivity	Design • Consideration of character, setting, level of protection and potential need for conservation during planning and design • Consideration of opportunities for enhancement of known features of industrial and cultural heritage significance Construction • Precautions for unexpected heritage discovery during construction	--	+

	may also provide an opportunity for improvement – particularly in relation to heritage features located in the townscape, where congestion may be reduced.	• Potential need for archaeological watching brief during construction, particularly in areas not previously developed • Consideration of unexpected heritage discovery in Construction Environmental Management Plans (CEMPs) Operation • None identified		
T&W LEVI Project	Construction Indirect effects may be experienced via noise and vibration and setting impacts during the installation of EV charge points but this is not anticipated to be significant. Operation No effects expected on cultural heritage due to the nature of the intervention.	Construction • Consideration of unexpected heritage discovery in CEMPs Operation • None identified	-	0
Traffic Signals Improvement Scheme	Construction Indirect effects may be experienced via noise and vibration and setting impacts during the works involved in traffic signal improvements but this is not anticipated to be significant. Operation New infrastructure involved in traffic signals improvements may have a detrimental effect on the character and setting of heritage assets and therefore impact on their quality and distinctiveness.	Design • Consideration of character, setting, level of protection and potential need for conservation during planning and design • Consideration of opportunities for enhancement of known features of industrial and cultural heritage significance Construction • Consideration of unexpected heritage discovery in CEMPs Operation • None identified	-	0

Safety Schemes	Construction Indirect effects may be experienced via noise and vibration and setting impacts during the works involved in safety schemes but this is not anticipated to be significant. Operation New infrastructure involved in safety schemes may have a detrimental effect on the character and setting of heritage assets and therefore impact on their quality and distinctiveness.	Design • Consideration of character, setting, level of protection and potential need for conservation during planning and design • Consideration of opportunities for enhancement of known features of industrial and cultural heritage significance Construction • Consideration of unexpected heritage discovery in CEMPs Operation • None identified	-	0
Electric Bus	Construction No construction is anticipated for this intervention. Operation No effects expected on cultural heritage due to the nature of the intervention.	Construction • None identified Operation • None identified	0	0
Maintenance Works: • A442 Queensway Upgrades • Footpath Maintenance • Street Lighting Maintenance • Drainage Maintenance • Street Furniture • Road Markings	Construction Indirect effects may be experienced via noise and vibration and setting impacts during the works involved in safety schemes but this is not anticipated to be significant. Operation No effects expected on cultural heritage where maintenance is refined to existing infrastructure.	Construction • Consideration of unexpected heritage assets in CEMPs Operation • None identified	-	0

- Structure Maintenance - Carriageway Maintenance				
Bus Improvements:	Construction Bus infrastructure works may have a detrimental effect on the character and setting of heritage assets depending on their nature and location and therefore impact on their quality and distinctiveness. Construction of infrastructure also has the potential for previously unknown heritage features to be disturbed or damaged. There is always a potential for unknown heritage features to be discovered or damaged during construction. Operation New infrastructure such as bus shelters may have a detrimental effect on the character and setting of heritage assets and therefore impact on their quality and distinctiveness.	Design - Consideration of character, setting, level of protection and potential need for conservation during planning and design - Consideration of opportunities for enhancement of known features of industrial and cultural heritage significance Construction - Precautions for unexpected heritage discovery during construction - Potential need for archaeological watching brief during construction, particularly in areas not previously developed - Consideration of unexpected heritage discovery in CEMPs Operation - None identified	--	-

ISA Objective 9 - Conserve and enhance the natural beauty of Telford and Wrekin's protected landscapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity

Intervention/ Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on Landscape
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Employment Centre Connectivity Package	Construction Carriageway and footway works may have a detrimental effect if located in designated areas, or areas of open space such as rural areas. Effects would be reduced in already developed, more urban areas, though here new infrastructure can encroach on areas identified as open space / recreation. The potential for significant adverse effects without further project level assessment cannot be ruled out at this stage. Operation In some circumstances there may be an opportunity for enhancement of landscape and visual e.g., as part of wider regeneration and where landscape enhancement forms part of scheme design. New or improvements to footways which act as active travel links afford potential to enhance visual amenity and reduce pressures on landscape by encouraging a modal shift away from private cars.	Design • Careful route selection. Particular protection to nationally designated areas required, with avoidance if possible • Consideration during planning / design to landscaping and screening, with care taken in choice of materials and species used • Consideration of potential opportunities for landscape enhancement Construction • Use of best practice construction techniques and Construction Environmental Management Plan (CEMP) to ensure that the character and quality of landscapes and townscapes are maintained as far as practicable during construction Operation • None		+
T&W LEVI Project	Construction The installation of EV charge points may have adverse effects on townscape and visual amenity but this is not anticipated to be significant. Operation There may be minor adverse effects on visual amenity with the installation of on-street EV charge points but due to their scale any effects are not expected to be significant.	Construction • Use of best practice construction techniques and CEMP to ensure that the character and quality of landscapes and townscapes are maintained as far as practicable during construction Operation • None identified		0

Traffic Signals Improvement Scheme	Construction Works involved in traffic signal improvements may have adverse effects on landscape, townscape and visual amenity but this is not anticipated to be significant. Operation New infrastructure involved in traffic signals improvements may have a detrimental effect on landscape, townscape and visual amenity.	Construction • Use of best practice construction techniques and CEMP to ensure that the character and quality of landscapes and townscapes are maintained as far as practicable during construction Operation • None identified	-	0
Safety Schemes	Construction Works involved in safety schemes may have adverse effects on landscape, townscape and visual amenity but this is not anticipated to be significant. Operation New infrastructure involved in safety schemes may have a detrimental effect on landscape, townscape and visual amenity.	Construction • Use of best practice construction techniques and CEMP to ensure that the character and quality of landscapes and townscapes are maintained as far as practicable during construction Operation • None identified	-	0
Electric Bus	Construction No construction is anticipated for this intervention. Operation No effects expected on landscape, townscape or visual amenity due to the nature of the intervention.	Construction • None identified Operation • None identified	0	0
Maintenance Works: • A442 Queensway Upgrades • Footpath Maintenance • Street Lighting Maintenance • Drainage Maintenance • Street Furniture	Construction Works involved in maintenances works may have adverse effects on landscape, townscape and visual amenity but this is not anticipated to be significant. Operation No significant effects expected on landscape, townscape or visual amenity where maintenance is refined to existing infrastructure. There may be beneficial effects on townscape and visual amenity	Construction • Use of best practice construction techniques and CEMP to ensure that the character and quality of landscapes and townscapes are maintained as far as practicable during construction Operation • None identified	-	+

• Road Markings • Structure Maintenance • Carriageway Maintenance	where rationalisation of street furniture may result in improvements.		
Bus Improvements: • Tender costs of services 99 to 104 • Demand Response Transport scheme • Bus Shelter Improvement Scheme • Bus service infrastructure civils works	Construction Bus infrastructure works may have a detrimental effect if located in designated areas, or areas of open space such as rural areas. Effects would be reduced in already developed, more urban areas. The potential for significant adverse effects without further project level assessment cannot be ruled out at this stage. Operation New infrastructure such as bus shelters may have a detrimental effect on landscape, townscape or visual amenity.	Design • Careful site selection. Particular protection to nationally designated areas required, with avoidance if possible • Consideration during planning / design to landscaping and screening, with care taken in choice of materials and species used • Consideration of potential opportunities for landscape enhancement Construction • Use of best practice construction techniques and CEMP to ensure that the character and quality of landscapes and townscapes are maintained as far as practicable during construction Operation • None	- -

ISA Objective 10 - Protect and enhance the water environment

Intervention/ Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on Water
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Employment Centre Connectivity Package	Construction Carriageway and footway works may result in an increase in impermeable areas, potentially leading to increased contaminated surface water runoff. Pollution incidents may also occur during construction. The potential for significant adverse effects without further project level assessment cannot be ruled out at this stage. Operation Carriageway and footway works may result in an increase in impermeable areas, potentially leading to increased contaminated surface water runoff. Pollution incidents may also occur during operation as a result of accidents. Where new or improved footways encourage a modal shift away from private cars pressures on the water environment may be reduced.	Design • Explore opportunities for use of SuDS Construction • Consideration of water quality and pollution in Construction Environmental Management Plans (CEMPs) • Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring Operation • Use of SuDS and / or conventional pollution control techniques such as petrol interceptors	--	+
T&W LEVI Project	Construction There is the potential for pollution incidents during installation of EV charge points but this is not anticipated to be significant. Operation Effects on the water environment due to the installation of EV charge points are expected to be limited due to their scale. Where the project encourages a move away from private diesel powered vehicles to more sustainable fuel, there may be a reduction in pollution from run off to the water environment.	Construction • Consideration of water quality and pollution in CEMPs • Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring Operation • None identified	-	+

Traffic Signals Improvement Scheme	Construction There is the potential for pollution incidents during works to traffic signals but this is not anticipated to be significant. Operation Where improvements are restricted to the existing road network, these schemes are not expected to increase impermeable areas and therefore effects on the water environment are limited.	Construction • Consideration of water quality and pollution in CEMPs • Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring Operation • None identified	-	0
Safety Schemes	Construction There is the potential for pollution incidents during works involved in safety schemes but this is not anticipated to be significant. Operation Where safety schemes are restricted to the existing road network, they are not expected to increase impermeable areas and therefore effects on the water environment are limited.	Construction • Consideration of water quality and pollution in CEMPs • Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring Operation • None identified	-	0
Electric Bus	Construction No construction is anticipated for this intervention. Operation Where improvements to electric buses encourages a move away from private diesel powered vehicles to more sustainable fuel, there may be a reduction in pollution from run off to the water environment.	Construction • None identified Operation • None identified	0	+
Maintenance Works: • A442 Queensway Upgrades • Footpath Maintenance • Street Lighting Maintenance	Construction There is the potential for pollution incidents during maintenance works but this is not anticipated to be significant. Operation	Construction • Consideration of water quality and pollution in CEMPs • Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring Operation	-	+

• Drainage Maintenance • Street Furniture • Road Markings • Structure Maintenance • Carriageway Maintenance	Where drainage maintenance improves the optimisation of drainage assets it may help to reduce the risk of pollution and benefit the water environment.	• None identified		
Bus Improvements: • Tender costs of services 99 to 104 • Demand Response Transport scheme • Bus Shelter Improvement Scheme • Bus service infrastructure civils works	Construction Bus infrastructure works, including bus shelters may result in an increase in impermeable areas, potentially leading to increased contaminated surface water runoff. Pollution incidents may also occur during construction. The potential for significant adverse effects without further project level assessment cannot be ruled out at this stage. Operation Where bus infrastructure works result in an increase in impermeable areas, this may lead to an increase in contaminated surface water runoff.	Design • Explore opportunities for use of SuDS Construction • Consideration of water quality and pollution in CEMPs • Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring Operation • Use of SuDS and / or conventional pollution control techniques such as petrol interceptors	--	-

ISA Objective 11 - Protect soil resources and avoid land contamination

Intervention/ Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on Soils	
Employment Centre Connectivity Package	Construction Carriageway and footway works have the potential to encroach on moderate to good agricultural lands, or greenfields, hence leading to a decrease in quality soils. There is also a potential that new areas could become contaminated e.g. following accidental pollution / road runoff etc. Some schemes may	Design • Avoidance of best and most versatile agricultural land • Remediation of land contamination if in existence Construction	--	+

	provide an opportunity to remediate contaminated land. Operation There is also a potential that new areas could become contaminated e.g. following accidental pollution infrastructure projects could introduce new sources of contamination e.g. through road runoff and pollution incidents.	• Consideration of soil quality and pollution in Construction Environmental Management Plans (CEMPs) • Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring Operation • Use of SuDS and / or conventional pollution control techniques such as petrol interceptors to prevent soil pollution		
T&W LEVI Project	Construction There may be minor adverse effects on soils during the installation of EV charge points with the potential of contamination incidents during construction. Operation No effects expected on soils during operation due to the nature of the intervention.	Construction • Consideration of soil quality and pollution in CEMPs • Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring Operation • None identified	-	0
Traffic Signals Improvement Scheme	Construction There may be minor adverse effects on soils during works involved with traffic signal improvements with the potential of contamination incidents during construction. Operation No effects expected on soils during operation due to the nature of the intervention.	Construction • Consideration of soil quality and pollution in CEMPs • Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring Operation • None identified	-	0
Safety Schemes	Construction There may be minor adverse effects on soils during works involved with safety schemes with the potential of contamination incidents during construction.	Construction • Consideration of soil quality and pollution in CEMPs	-	0

	Operation No effects expected on soils during operation due to the nature of the intervention.	Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring Operation		
Electric Bus	Construction No construction is anticipated for this intervention. Operation No effects expected on soils during operation due to the nature of the intervention.	None identified Construction	0	0
Maintenance Works: - A442 Queensway Upgrades - Footpath Maintenance - Street Lighting Maintenance - Drainage Maintenance - Street Furniture - Road Markings - Structure Maintenance - Carriageway Maintenance	Construction Maintenance works are unlikely to result in direct loss of or encroachment onto agricultural lands, or greenfields where works are confined to existing infrastructure. There is however the potential for contamination incidents during construction. Operation No effects expected on soils during operation due to the nature of the intervention.	Construction - Consideration of soil quality and pollution in CEMPs - Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring Operation - None identified	-	0
Bus Improvements: - Tender costs of services 99 to 104 - Demand Response Transport scheme	Construction There is potential for loss of or encroachment on agricultural lands, or greenfields where works may include carriageway widening for bus boarders. There is also the potential for contamination incidents during construction. Operation	Construction - Consideration of soil quality and pollution in CEMPs - Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring	--	0

- Bus Shelter Improvement Scheme - Bus service infrastructure civils works	No effects expected on soils during operation due to the nature of the intervention.	Operation None identified	
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ISA Objective 12 - Promote sustainable use of resources and natural assets

Intervention/ Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on natural resources	
Employment Centre Connectivity Package	Construction Carriageway and footway works may require significant additional resources and increased waste production. There may be opportunities for the use of recycled materials in construction. Operation Where footway works encourage uptake of sustainable transport modes, beneficial effects on resources and natural assets would be anticipated.	Design - Sustainable design measures Construction - Consideration of waste hierarchy and use of recycled or re-used materials in a Site Waste Management Plan (SWMP) Operation - None identified	--	+
T&W LEVI Project	Construction Resources would be required for the installation of EV charge points although these are not anticipated to be significant. Operation Where on street EV charge points encourage uptake of sustainable transport modes, beneficial effects on resources and natural assets would be anticipated.	Construction - Consideration of waste hierarchy and use of recycled or re-used materials in a SWMP Operation - None identified	-	0
Traffic Signals Improvement Scheme	Construction Resources would be required for traffic signal improvements although these are not anticipated to be significant.	Construction Consideration of waste hierarchy and use of recycled or re-used materials in a SWMP	-	0

	Operation No effects expected on resource use during operation due to the nature of the intervention.	Operation • None identified		
Safety Schemes	Construction Resources would be required for construction involved in the safety schemes although these are not anticipated to be significant. Operation No effects expected on resource use during operation due to the nature of the intervention.	Construction • Consideration of waste hierarchy and use of recycled or re-used materials in a SWMP Operation • None identified	-	0
Electric Bus	Construction No construction is anticipated for this intervention. Operation A switch to electric buses would be beneficial in terms of resource as there would be a move to more sustainable transport.	Construction • None identified Operation • None identified	0	+
Maintenance Works: • A442 Queensway Upgrades • Footpath Maintenance • Street Lighting Maintenance • Drainage Maintenance • Street Furniture • Road Markings • Structure Maintenance • Carriageway Maintenance	Construction Resources would be required for construction involved in the maintenance works although these are not anticipated to be significant. Operation No effects expected on resource use during operation due to the nature of the intervention.	Construction • Consideration of waste hierarchy and use of recycled or re-used materials in a SWMP Operation • None identified	-	0
Bus Improvements:	Construction	Construction	--	+

• Tender costs of services 99 to 104 • Demand Response Transport scheme • Bus Shelter Improvement Scheme • Bus service infrastructure civils works	Resources would be required for construction involved in bus infrastructure works although these are not anticipated to be significant. Operation Where improvements to bus services encourage their use it would be beneficial in terms of resource as there would be a move to more sustainable transport.	• Consideration of waste hierarchy and use of recycled or re-used materials in a SWMP Operation • None identified	
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ISA Objective 13 - Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all

Intervention/ Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on the economy	
Employment Centre Connectivity Package	Construction Carriageway and footway works will require staff to construct and therefore maintain / improve employment in the construction industry. Operation The interventions aim to improve accessibility in employment centres and potentially widen the range of accessible employment opportunities.	Construction • Provide employment opportunities to unskilled / apprentices at construction stage Operation • Implement a plan of maintenance and improvement to ensure that the connectivity to economic centres is maintained	++	++
T&W LEVI Project	Construction Construction involved in the installation of EV charge points may maintain / improve employment in the construction industry, although due to the limited scale	Construction	+	+

	of construction, benefits are not anticipated to be significant. Operation Where on street EV charge points provide better access to this mode of transport they may potentially widen the range of accessible employment opportunities.	• Provide employment opportunities to unskilled / apprentices at construction stage Operation • Implement a plan of maintenance and improvement to ensure that the connectivity to economic centres is maintained		
Traffic Signals Improvement Scheme	Construction Construction involved in the improvement of traffic signals may maintain / improve employment in the construction industry, although due to the limited scale of construction, benefits are not anticipated to be significant. Operation Operation of these interventions may increase network efficiency and help to reduce congestion in areas, therefore improving access to employment and skills.	Construction • Provide employment opportunities to unskilled / apprentices at construction stage Operation • None identified	+	+
Safety Schemes	Construction Construction involved safety schemes may maintain / improve employment in the construction industry, although due to the limited scale of construction, benefits are not anticipated to be significant. Operation No effects expected in terms of the economy during operation due to the nature of the intervention.	Construction • Provide employment opportunities to unskilled / apprentices at construction stage Operation • None identified	+	0
Electric Bus	Construction No construction is anticipated for this intervention. Operation No effects expected in terms of the economy during operation due to the nature of the intervention.	Construction • None identified Operation • None identified	0	0

Maintenance Works: • A442 Queensway Upgrades • Footpath Maintenance • Street Lighting Maintenance • Drainage Maintenance • Street Furniture • Road Markings • Structure Maintenance • Carriageway Maintenance	Construction Maintenance works will require staff to construct and therefore maintain / improve employment in the construction industry. Operation No effects expected in terms of the economy during operation due to the nature of the intervention.	Construction • Provide employment opportunities to unskilled / apprentices at construction stage Operation • None identified	+	0
Bus Improvements: • Tender costs of services 99 to 104 • Demand Response Transport scheme • Bus Shelter Improvement Scheme • Bus service infrastructure civils works	Construction Bus infrastructure works will require staff to construct and therefore maintain / improve employment in the construction industry. Operation Improvements to bus services encourage use of public transport and improve accessibility, therefore improving access to employment and skills.	Construction • Provide employment opportunities to unskilled / apprentices at construction stage Operation • None identified	++	+

ISA Objective 14 - Support the wider coordination of land use and energy planning across Telford and Wrekin

Intervention/ Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on land use and energy planning	
Employment Centre Connectivity Package	Construction No significant effects identified. Operation A coordinated approach to the delivery of carriageway and footway works should support and create opportunities for wider land use planning across the Telford and Wrekin area. This includes providing sustainable connectivity and transport options at land zoned for development.	Design - Consideration of design in relation to land use plans and planning requirements Construction - None identified Operation - None identified	0	++
T&W LEVI Project	Construction No significant effects identified. Operation A coordinated approach to the installation of EV charge points should support and create opportunities for wider land use planning across the Telford and Wrekin area. This includes providing sustainable connectivity and transport options at land zoned for development.	Design - Consideration of design in relation to land use plans and planning requirements Construction - None identified Operation - None identified	0	+
Traffic Signals Improvement Scheme	Construction No significant effects identified. Operation No effects expected in terms land use and energy planning during operation of the intervention.	Design - Consideration of design in relation to land use plans and planning requirements Construction - None identified Operation	0	0

		• None identified		
Safety Schemes	Construction No significant effects identified. Operation No effects expected in terms land use and energy planning during operation of the intervention.	Design • Consideration of design in relation to land use plans and planning requirements Construction • None identified Operation • None identified	0	0
Electric Bus	Construction No construction is anticipated for this intervention. Operation No effects expected in terms land use and energy planning during operation of the intervention.	Construction • None identified Operation • None identified	0	0
Maintenance Works: • A442 Queensway Upgrades • Footpath Maintenance • Street Lighting Maintenance • Drainage Maintenance • Street Furniture • Road Markings • Structure Maintenance • Carriageway Maintenance	Construction No significant effects identified. Operation These works are for the most part within existing infrastructure and do not require extensive co-ordination with land use planning.	Construction • None identified Operation • None identified	0	0
Bus Improvements:	Construction No significant effects identified.	Design	0	++

• Tender costs of services 99 to 104 • Demand Response Transport scheme • Bus Shelter Improvement Scheme • Bus service infrastructure civils works	Operation An expanded bus network would require effective land use and transport planning coordination.	• Consideration of design in relation to land use plans and planning requirements Construction • None identified Operation • None identified	
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ISA Objective 15 - Improve health and well-being for all citizens and reduce inequalities in health (HIA specific objective)

Intervention/ Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on health and wellbeing	
Employment Centre Connectivity Package	Construction Carriageway and footway works would afford employment opportunities however may lead to severance and accessibility issues, which may also disproportionately impact on those without access to private cars. There may be some adverse air quality emissions during construction which may impact children and those with respiratory conditions. Operation Carriageway works will primarily benefit those in ownership of cars, though some benefit will likely be experienced by bus passengers and users of taxis. While access will be increased to employment opportunities specifically, access to public services /	Design • Consider opportunities to improve access • Introduction of footpaths and cycle lanes (if nature of carriageway allows) • Consider potential for severance from key public services, or opportunities to improve access Construction • Consideration of air quality in Construction Environmental Management Plans (CEMPs).	-	++

	recreational facilities would also improve which has consequent benefits in respect of health and wellbeing. Footway works may benefit disadvantaged groups in society by improving pedestrian and cycleway access and enjoyment.	• Ensure consideration of access to key public services is maintained Operation • Implement a plan of maintenance and improvement to ensure that footpaths and cycle lanes remain an attractive option		
T&W LEVI Project	Construction No significant effects identified. Operation Where EV charge points support uptake of low and zero emitting vehicles, therefore act to reduce air quality pressures and this would be expected have benefits in terms of health, particularly for children and those with respiratory conditions.	Construction • None identified Operation • None identified	0	+
Traffic Signals Improvement Scheme	Construction No significant effects identified. Operation Where these improvements increase the network efficiency there may be improved accessibility to health and wellbeing services and facilities.	Construction • Consideration of air quality in Construction Environmental Management Plans (CEMPs). • Ensure consideration of access to key public services is maintained Operation • None identified	0	+
Safety Schemes	Construction No significant effects identified. Operation Benefits are expected in terms of the safety schemes which will look at schemes designed to reduce collision risk and address safety issues.	Construction • Consideration of air quality in Construction Environmental Management Plans (CEMPs). • Ensure consideration of access to key public services is maintained Operation • None identified	0	++

Electric Bus	Construction No construction is anticipated for this intervention. Operation Moving away from traditional fuelled buses to low and zero emitting vehicles is expected to reduce air quality pressures and this would have benefits in terms of health, particularly for children and those with respiratory conditions.	Construction • None identified Operation • None identified	0	+
Maintenance Works: • A442 Queensway Upgrades • Footpath Maintenance • Street Lighting Maintenance • Drainage Maintenance • Street Furniture • Road Markings • Structure Maintenance • Carriageway Maintenance	Construction Maintenance works may cause severance and accessibility issues, which may also disproportionately impact on those without access to private cars. Operation Maintenance works would act to ensure access to public services / recreational facilities is maintained, therefore having beneficial effects in terms of health and wellbeing.	Construction • Consideration of air quality in Construction Environmental Management Plans (CEMPs). • Ensure consideration of access to key public services is maintained Operation • Implement a plan of maintenance and improvement to ensure that footpaths and cycle lanes remain an attractive option	-	+
Bus Improvements: • Tender costs of services 99 to 104 • Demand Response Transport scheme • Bus Shelter Improvement Scheme	Construction There may be some adverse air quality emissions during construction which may impact children and those with respiratory conditions. Bus improvement works may cause severance and accessibility issues, which may also disproportionately impact on those without access to private cars. Operation	Design • Consider opportunities to improve access Construction • Ensure consideration of access to key public services is maintained Operation • None identified	-	++

- Bus service infrastructure civils works
- Improvements to the bus network may allow more people to access the service and in turn make use of it to access health and wellbeing services and facilities.

ISA Objective 16 - Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (EqIA specific objective)

Intervention/ Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on equality of opportunity
Employment Centre Connectivity Package	Construction Carriageway and footway works would afford employment opportunities however may lead to severance and accessibility issues, which may also disproportionately impact on those without access to private cars. Operation Carriageway works will primarily benefit those in ownership of cars, though some benefit will likely be experienced by bus passengers and users of taxis. While access will be increased to employment opportunities specifically, access to public services / recreational facilities would also improve which has consequent benefits in respect of health and wellbeing. Footway works may benefit disadvantaged groups in society by improving free pedestrian and cycleway access and enjoyment.	Design • Consider opportunities to improve access • Introduction of footpaths and cycle lanes (if nature of carriageway allows) • Consider potential for severance from key public services, or opportunities to improve access Construction • Ensure consideration of access to key public services is maintained Operation • Implement a plan of maintenance and improvement to ensure that footpaths and cycle lanes remain an attractive option	-
T&W LEVI Project	Construction No significant effects identified. Operation	Construction • None identified Operation • Consideration of affordability	0

	Whilst installation of on street EV charge points may increase the accessibility of this mode of transport, low income groups are less likely to be able to access this it has they may be unable to afford a car or switch from their current vehicle to an EV.			
Traffic Signals Improvement Scheme	Construction No significant effects identified. Operation Where these improvements increase the network efficiency there may be improved accessibility for both road users and pedestrians and cyclists.	Construction • Ensure consideration of access to key public services is maintained Operation • None identified	0	+
Safety Schemes	Construction No significant effects identified. Operation Benefits are expected in terms of the safety schemes which will look at schemes designed to reduce collision risk and address safety issues and should be beneficial for all groups including children, the elderly and those with mobility issues.	Construction • Ensure consideration of access to key public services is maintained Operation • None identified	0	++
Electric Bus	Construction No construction is anticipated for this intervention. Operation This intervention is not expected to impact on equality of opportunity.	Construction • None identified Operation • Consideration of affordability / ticket pricing	0	0
Maintenance Works: • A442 Queensway Upgrades • Footpath Maintenance • Street Lighting Maintenance	Construction Maintenance works may cause severance and accessibility issues, which may also disproportionately impact on those without access to private cars. Operation Maintenance works would act to ensure access to public services / recreational facilities is maintained,	Construction • Ensure consideration of access to key public services is maintained Operation • Implement a plan of maintenance and improvement to ensure that footpaths and cycle lanes remain an attractive option	-	+

• Drainage Maintenance • Street Furniture • Road Markings • Structure Maintenance • Carriageway Maintenance	therefore having beneficial effects on both drivers and pedestrians and cyclists.			
Bus Improvements: • Tender costs of services 99 to 104 • Demand Response Transport scheme • Bus Shelter Improvement Scheme • Bus service infrastructure civils works	Construction Bus improvement works may cause severance and accessibility issues, which may also disproportionately impact on those without access to private cars. Operation Improvements to the bus network may allow more people to access the service and be able to access services and facilities.	Design • Consider opportunities to improve access Construction • Ensure consideration of access to key public services is maintained Operation • None identified	-	++

ISA Objective 17 - Promote fairness and equity in rural connectivity (Rural proofing specific objective)

Intervention/ Intervention Type	Likely effects	Typical specific Mitigation for type of scheme	Overall likely effect on rural connectivity	
Employment Centre Connectivity Package	Construction No significant impacts identified. Operation Where employment centres are located in urban areas carriageway and footway works would not be	Design • Opportunities to improve connectivity with rural communities should be integrated in design Construction	0	+

	expected to improve rural connectivity. There is however the potential for that there may be some benefits for those in rural communities as the employment centres are in the urban fringes.	• None identified Operation • None identified		
T&W LEVI Project	Construction No significant effects identified. Operation This intervention is not expected to promote rural connectivity.	Construction • None identified Operation • None identified	0	0
Traffic Signals Improvement Scheme	Construction No significant effects identified. Operation This intervention is not expected to promote rural connectivity, with the majority of traffic signals likely to be located in urban areas.	Construction • None identified Operation • None identified	0	0
Safety Schemes	Construction No significant effects identified. Operation This intervention is not expected to promote rural connectivity.	Construction • None identified Operation • None identified	0	0
Electric Bus	Construction No construction is anticipated for this intervention. Operation This intervention is not expected to promote rural connectivity.	Construction • None identified Operation • None identified	0	0
Maintenance Works: • A442 Queensway Upgrades • Footpath Maintenance	Construction Maintenance works may cause severance and accessibility issues if located in rural areas. Operation	Construction • Ensure consideration is made of maintaining access Operation • None identified	-	+

• Street Lighting Maintenance • Drainage Maintenance • Street Furniture • Road Markings • Structure Maintenance • Carriageway Maintenance	Where maintenance works are carried out in rural areas connectivity and network efficiency would be maintained or improved.			
Bus Improvements: • Tender costs of services 99 to 104 • Demand Response Transport scheme • Bus Shelter Improvement Scheme • Bus service infrastructure civils works	Construction Bus improvement works may cause severance and accessibility issues if located in rural areas. Operation Improvements to the bus network may enable greater access to this mode of transport for those in rural areas.	Design • Opportunities to improve connectivity with rural communities should be integrated in design Construction • Ensure consideration is made of maintaining access Operation • None identified	-	++

F.2 Locational Assessments

Telford Central - Ramp Access

Scheme Name		Telford Central - Ramp Access						
Scheme Description		Installation of ramp access from Platform 2 to the Silver Swallow Bridge, linking to Telford Town Centre, Platform 1 and the main entrance of Telford Central Station, significantly improving accessibility and providing a resilient, user-friendly alternative that enhances the overall journey experience.						
ISA Topic	ISA Objective	Comment	Mitigation	Residual Construction		Residual Operational		
				Positive Effects	Negative Effects	Positive Effects	Negative Effects	
Air Quality & Noise Pollution	Protect and improve air quality	There are no AQMAs within 10km of the scheme. It is anticipated that there will be negative effects on air quality during the construction phase although these are no expected to be significant. Ramp access at the station is not anticipated to have any notable impacts on air quality during operation.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on air quality e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Reduce the impact on environmental noise from transportation sources	The nearest Noise Action Important Area is approximately 30m from the station. It is anticipated that there will be negative effects on noise during the construction phase although these are no expected to be significant. Ramp access at the station is not anticipated to have any notable impacts on noise during operation.	Consideration of noise in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on noise e.g., timing of works or ensuring all plant and machinery are switched off when not in use.	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Climate	Reduce carbon emissions from transport and contribute to meeting Telford and Wrekin's goal of carbon neutral by 2030	Construction activities will result in CO2 emissions although these are not expected to be significant. Ramp access at the station is not anticipated to have any notable impacts on noise during operation.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise emissions e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding	The scheme does not fall within Flood Zones 2 or 3. There is not anticipated to be any notable increase in impermeable surfaces and therefore the risk of flooding is not anticipated to be increased.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMP's). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty

Biodiversity	Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	The closest LNR (Randlay Valley) is approximately 1km south. There is an area of Deciduous Woodland Priority Habitat adjacent to the station in the north. There are no SSSIs, NNRs, RSPB Reserves, Ancient Woodland Biosphere Reserves or MCZs within 1km of the scheme. During construction, indirect effects on the adjacent priority habitat are possible. Ramp access at the station is not anticipated to have any notable impacts on biodiversity during operation	Consideration of the timing of construction works in relation to ecological windows and legislative requirements. Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs). Appropriate management of invasive species where applicable. Control of invasive species where necessary.	0	-	0	0		
				Characterisation of effects					
				✓	✓	✓	✓		Magnitude
				Local	Local	Local	Local		Scale
				ST	ST	LT	LT		Duration
				Temp	Temp	Perm	Perm		Permanence
				Med	Med	Med	Med		Certainty
	Protect and enhance sites designated for their international importance for nature conservation purposes (linked to HRA)	There are no SPAs, SACs or Ramsar sites within 10km of the scheme and none are identified as being hydrologically connected. The HRA concludes that the scheme is unlikely to result in significant effects on any European site The scheme is therefore not anticipated to impact on internationally designated sites during construction or operation.	None identified.	0	0	0	0		
				Characterisation of effects					
				✓	✓	✓	✓		Magnitude
				Local	Local	Local	Local		Scale
				ST	ST	LT	LT		Duration
				Temp	Temp	Perm	Perm		Permanence
				Med	Med	Med	Med		Certainty
Geodiversity	Protect, enhance and promote geodiversity	No geologically significant features have been identified in proximity to the scheme. The scheme is not anticipated to affect geodiversity as works are within the existing station.	Consideration of geodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs)	0	0	0	0		
				Characterisation of effects					
				✓	✓	✓	✓		Magnitude
				Local	Local	Local	Local		Scale
				ST	ST	LT	LT		Duration
				Temp	Temp	Perm	Perm		Permanence
				Med	Med	Med	Med		Certainty
Historic Environment	Protect and enhance cultural heritage assets and their settings, and the wider historic environment	The nearest listed building is 'York House' (Grade II) located 0.7km north east. No World Heritage Sites, Scheduled Monuments, Conservation Areas, Protected Wreck Sites, Battlefields or Parks and Gardens are located within 2km. There is unlikely to be significant adverse effects on designated heritage during construction or operation of the scheme due to their proximity. Discovery of unexpected heritage assets is unlikely as the ramp will be within the existing station.	Consideration of unexpected heritage discovery in Construction Environmental Management Plans (CEMPs).	0	0	0	0		
				Characterisation of effects					
				✓	✓	✓	✓		Magnitude
				Local	Local	Local	Local		Scale
				ST	ST	LT	LT		Duration
				Temp	Temp	Perm	Perm		Permanence
				Med	Med	Med	Med		Certainty
Landscape and Visual	Conserve and enhance the natural beauty of Telford and Wrekin's protected landscapes and townscapes, protect wider landscapes, seascapes	The option falls within Mid Severn Sandstone Plateau National Character Area. There are no National Landscapes, National Trails or National Parks within 4km of the scheme. No significant effects are anticipated during construction or operation as the scheme is within an already	Use of best practice construction techniques and Construction Environmental Management Plan (CEMP) to ensure that the character and quality of landscapes and townscapes are maintained as far as practicable during construction.	0	-	0	0		
				Characterisation of effects					
				✓	✓	✓	✓		Magnitude
				Local	Local	Local	Local		Scale
				ST	ST	LT	LT		Duration

	and townscapes and enhance visual amenity	developed area. Minor adverse effects are possible in terms of visual amenity during construction.	Opportunities to improve townscape, e.g. through decluttering of signage to be considered during design.	Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Water	Protect and enhance the water environment	The closest DWSZ for surface water is approximately 1km north. There are no WFD Rivers, Canals or Lakes, SPZs, Groundwater DWSZ or Bathing Water sites within 2km of the scheme. Construction is unlikely to have any significant adverse effects on water although there is potential for pollution incidents.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Soil	Protect soil resources and avoid land contamination	The scheme is within Non Agricultural Land. Lilleshall/Lilleshall Works, Snedshill Historic Landfill Site is located approximately 80m north of the scheme. No significant effects are anticipated during construction or operation due to the schemes location in the existing station.	Consideration of soil quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring. Use of SuDS and / or conventional pollution control techniques such as petrol interceptors to prevent soil pollution.	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Natural Resources	Promote sustainable use of resources and natural assets	The nearest permitted waste site (Granville Landfill Site) is approximately 3km north east. Construction will require resources although this is not likely to be significant.	Consideration of waste hierarchy and use of recycled or re-used materials in a Site Waste Management Plan (SWMP).	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Economic	Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all	Construction activities will provide/maintain employment opportunities, although these are expected to be limited. The scheme may also improve accessibility and connectivity to jobs and skills by improving access from the station and Telford Town Centre.	Provide employment opportunities to unskilled / apprentices at construction stage.	+	0	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Support the wider coordination of land use and energy planning across Telford and Wrekin	The scheme is within Telford built up area. The scheme improves connectivity between the station and Telford Town centre and may therefore be beneficial in relation to coordination of land use, energy planning and transport planning.	None identified.	0	0	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration

				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Social	Improve health and well-being for all citizens and reduce inequalities in health (<i>HIA specific objective</i>)	There may be a minor increase in air quality emissions during construction which would particularly impact children, elderly and other vulnerable groups including those with respiratory conditions. The scheme will improve accessibility and connectivity from the station and Telford Town Centre and may subsequently improve health and wellbeing where people can more easily access services and facilities.	Consideration of air quality in Construction Environmental Management Plans (CEMPs).	0	-	++	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (<i>EqIA specific objective</i>)	Ramp access from the station onwards to Telford Town Centre would provide greater equality of opportunity as the scheme would allow those who are disabled or have mobility problems to access this route. Access may be increased to employment opportunities and public services / recreational facilities.	None identified.	0	0	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Rural	Promote fairness and equity in rural connectivity (<i>Rural proofing specific objective</i>)	The scheme is not anticipated to improve rural connectivity.	None identified.	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty

Railway Station Upgrades

Scheme Name		Railway Station Upgrades						
Scheme Description		A programme of station improvements, including enhanced passenger facilities and better integration with nearby transport links, aimed at creating a more accessible, comfortable and user-friendly environment that supports improved connectivity and encourages greater use of public transport. <i>For the purposes of this assessment, the station upgrades are considered at Wellington Station.</i>						
ISA Topic	ISA Objective	Comment	Mitigation	Residual Construction		Residual Operational		
				Positive Effects	Negative Effects	Positive Effects	Negative Effects	
Air Quality & Noise Pollution	Protect and improve air quality	There are no AQMAs within 10km of Wellington Station. It is anticipated that there will be negative effects on air quality during the construction phase and this has the potential to be significant depending on the exact nature of the improvements. Improvements such as better integration with nearby transport links may encourage the use of public transport and move away from the use of private cars which would be beneficial in terms of air quality during operation.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on air quality e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	--	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Reduce the impact on environmental noise from transportation sources	The nearest Noise Action Important Area is approximately 0.8km north of Wellington Station. It is anticipated that there will be negative effects on noise during the construction phase and this has the potential to be significant depending on the exact nature of the improvements. Improvements such as better integration with nearby transport links may encourage the use of public transport and move away from the use of private cars which would be beneficial in terms of environmental noise during operation.	Consideration of noise in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on noise e.g., timing of works or ensuring all plant and machinery are switched off when not in use.	0	--	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Climate	Reduce carbon emissions from transport and contribute to meeting Telford and Wrekin's goal of carbon neutral by 2030	Construction activities will result in CO2 emissions and this has the potential to be significant depending on the exact nature of the improvements. Improvements such as better integration with nearby transport links may encourage the use of public transport and move away from the use of private cars which would be beneficial in terms of emissions during operation.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise emissions e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	--	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding	The scheme does not fall within Flood Zones 2 or 3. As the station is within a developed area there is not expected to be any notable increases in impermeable surfaces and therefore the risk of flooding is not anticipated to be increased.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMP's). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence

				Med	Med	Med	Med	Certainty
Biodiversity	Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	The closest LNR (Dothill) is approximately 1km north and The Wrekin & The Ercall SSSI is 1.2km south. There is an area of Deciduous Woodland Priority Habitat 0.6km south and an area of Ancient Woodland 1km south. There are no NNRs, RSPB Reserves, Biosphere Reserves or MCZs within 10km of the scheme. During construction, may be indirect effects such as noise and light pollution on nearby habitats and species. During operation, a move towards public transport and away from private cars could reduce pressures on habitat and species.	Consideration of the timing of construction works in relation to ecological windows and legislative requirements. Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs). Appropriate management of invasive species where applicable. Control of invasive species where necessary.	0	-	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Protect and enhance sites designated for their international importance for nature conservation purposes (linked to HRA)	There are no SPAs, SACs or Ramsar sites within 10km of the scheme and none are identified as being hydrologically connected. The HRA concludes that the scheme is unlikely to result in significant effects on any European site The scheme is therefore not anticipated to impact on internationally designated sites during construction or operation.	None identified.	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Geodiversity	Protect, enhance and promote geodiversity	No geologically significant features have been identified in proximity to the scheme. The scheme is not anticipated to affect geodiversity as works will largely be within the existing station and surrounding built up area.	Consideration of geodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs).	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Historic Environment	Protect and enhance cultural heritage assets and their settings, and the wider historic environment	There are approximately eight Grade II and one Grade II* listed buildings within 0.1km of Wellington Station. Parts of the station on the southern site of the railway intersects Wellington Conservation Area. Orleton Hall Park and Garden is 1.4km south west. No World Heritage Sites, Scheduled Monuments, Protected Wreck Sites or Battlefields are located within 2km. There is potential adverse effects on the listed buildings and the conservation area during construction through vibration or setting impacts although it is anticipated that any effects will be temporary. Discovery of unexpected heritage assets is unlikely as the improvements will be within the existing station and surrounding developed area. Whilst the exact nature and locations of the upgrades are unknown, effects on heritage assets during operation are not anticipated to be significant.	Any activities within close proximity which could cause damage or disturbance to these assets, including parking vehicles should be avoided and be managed via a CEMP. Precautions for unexpected heritage discovery during construction. Potential need for archaeological watching brief during construction, particularly in areas not previously developed. Consideration of unexpected heritage discovery in Construction Environmental Management Plans (CEMPs).	0	--	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty

Landscape and Visual	Conserve and enhance the natural beauty of Telford and Wrekin’s protected landscapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity	The option falls within Shropshire, Cheshire and Staffordshire Plain National Character Area. Shropshire Hills National Landscape is 1.4km south of Wellington Station. There are no National Trails or National Parks within 30km of the scheme. No significant effects are anticipated during construction or operation as the scheme is within an already developed area. Minor adverse effects are possible in terms of visual amenity during construction.	Use of best practice construction techniques and Construction Environmental Management Plan (CEMP) to ensure that the character and quality of landscapes and townscapes are maintained as far as practicable during construction. Opportunities to improve townscape, e.g. through decluttering of signage to be considered during design.	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Water	Protect and enhance the water environment	Beanhill Brook source to shawbirch B4394 WFD River is 1.4km west of Wellington Station. The station is within a DWSZ for surface water and intersects areas of SPZ 2 and 3. There are no WFD Canals or Lakes, Groundwater DWSZ or Bathing Water sites within 4km of the scheme. Construction is unlikely to have any significant adverse effects on water although there is potential for pollution incidents.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Soil	Protect soil resources and avoid land contamination	The scheme is Urban land. Whitchurch Drive Historic Landfill Site is located approximately 1km east of the scheme. No significant effects are anticipated during construction or operation due to the schemes location in the existing station and surrounding developed area.	Consideration of soil quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring. Use of SuDS and / or conventional pollution control techniques such as petrol interceptors to prevent soil pollution.	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Natural Resources	Promote sustainable use of resources and natural assets	The nearest permitted waste site (Sinclair Works Landfill Site) is approximately 1.9km south east. Construction will require resources for the improvements.	Consideration of waste hierarchy and use of recycled or re-used materials in a Site Waste Management Plan (SWMP).	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Economic	Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all	Construction activities will provide/maintain employment opportunities. The scheme may also improve accessibility and connectivity to jobs and skills by integrating with nearby transport links and supporting improved connectivity.	Provide employment opportunities to unskilled / apprentices at construction stage.	+	0	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty

	Support the wider coordination of land use and energy planning across Telford and Wrekin	The scheme is within Telford built up area. The scheme improves connectivity between the station and nearby transport links and may therefore be beneficial in relation to coordination of land use, energy planning and transport planning.	None identified.	0	0	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Social	Improve health and well-being for all citizens and reduce inequalities in health (<i>HIA specific objective</i>)	There may be an increase in air quality emissions during construction which would particularly impact children, elderly and other vulnerable groups including those with respiratory conditions. It is noted that Wellington Medical Practice is approximately 150m south west. Where the scheme improves accessibility and connectivity from the station and it will subsequently improve health and wellbeing where people can more easily access services and facilities. Integration with nearby transport links may include the national cycle route to the east of the station. This will make this mode of transport more accessible and safer for wider and vulnerable groups.	Consideration of air quality in Construction Environmental Management Plans (CEMPs).	0	-	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (<i>EqIA specific objective</i>)	Improvements may promote greater equality of opportunity as they would allow for improved accessibility and connectivity. Access may be increased to employment opportunities and public services / recreational facilities. Integration with nearby transport links such active travel links would make this mode of transport more accessible and safer for wider and vulnerable groups. However, some groups including disabled, elderly and pregnant women may not benefit from this aspect of the intervention.	None identified.	0	0	++	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Rural	Promote fairness and equity in rural connectivity (<i>Rural proofing specific objective</i>)	Better integration with nearby transport links may improve connectivity with rural areas.	None identified.	0	0	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty

Hollinswood Interchange Improvements

Scheme Name	Hollinswood Interchange Improvements
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Scheme Description		Delivery of capacity improvements to Hollinswood Interchange to reduce delay, improve flow, and enhance overall network performance under current and future demand.						
ISA Topic	ISA Objective	Comment	Mitigation	Residual Construction		Residual Operational		
				Positive Effects	Negative Effects	Positive Effects	Negative Effects	
Air Quality & Noise Pollution	Protect and improve air quality	There are no AQMAs within 10km of the scheme. It is anticipated that there will be negative effects on air quality during the construction phase. Significant effects cannot be ruled out until the nature of the improvements are known. Where the capacity improvements reduce congestion there is likely to be benefits in terms of air quality.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on air quality e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	--	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
		Med	Med	Med	Med	Certainty		
	Reduce the impact on environmental noise from transportation sources	The nearest Noise Action Important Area is adjacent to the interchange. It is anticipated that there will be negative effects on noise during the construction phase. Significant effects cannot be ruled out until the nature of the improvements are known. Where the capacity improvements reduce congestion there is likely to be benefits in terms of environmental noise.	Consideration of noise in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on noise e.g., timing of works or ensuring all plant and machinery are switched off when not in use.	0	--	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
Temp				Temp	Perm	Perm	Permanence	
	Med	Med	Med	Med	Certainty			
Climate	Reduce carbon emissions from transport and contribute to meeting Telford and Wrekin's goal of carbon neutral by 2030	Construction activities will result in CO2 emissions. Significant effects cannot be ruled out until the nature of the improvements are known. Where the capacity improvements reduce congestion there is likely to be benefits in terms of CO2 emissions.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise emissions e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	--	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
		Med	Med	Med	Med	Certainty		
	Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding	The scheme does not fall within Flood Zones 2 or 3. There may be an increase in impermeable surface where improvements involve road widening or adding new lanes for example, which would increase the risk of flooding but it is anticipated that most of works will be within the existing road network and therefore negative effects would not be significant.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMP's). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
Temp				Temp	Perm	Perm	Permanence	
	Med	Med	Med	Med	Certainty			
Biodiversity	Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the	The closest LNR (Randlay Valley) is approximately 0.6km south. There is an area of Deciduous Woodland Priority Habitat adjacent to the interchange in the south east. There are no SSSIs, NNRs, RSPB Reserves,	Consideration of the timing of construction works in relation to ecological windows and legislative requirements.	0	--	+	0	
				Characterisation of effects				

	achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	Ancient Woodland Biosphere Reserves or MCZs within 3km of the scheme. During construction, loss of the adjacent priority habitat is possible. There may also be indirect effects such as noise and light pollution during construction. During operation, the project is not anticipated to have significant effects on any designated sites, however indirect effects may be possible. It is to be noted that a reduction in congestion could reduce pressures on habitat and species.	Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs). Appropriate management of invasive species where applicable. Control of invasive species where necessary.	✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Protect and enhance sites designated for their international importance for nature conservation purposes (linked to HRA)	There are no SPAs, SACs or Ramsar sites within 10km of the scheme and none are identified as being hydrologically connected. The HRA concludes that the scheme is unlikely to result in significant effects on any European site The scheme is therefore not anticipated to impact on internationally designated sites during construction or operation.	Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs).	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
Temp				Temp	Perm	Perm	Permanence	
Geodiversity	Protect, enhance and promote geodiversity	No geologically significant features have been identified in proximity to the scheme. The scheme has the potential to affect geodiversity during construction, however if improvements are confined to the existing interchange effects are expected to be limited.	Consideration of geodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs).	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Historic Environment	Protect and enhance cultural heritage assets and their settings, and the wider historic environment	The nearest listed building is ‘York House’ (Grade II) located 0.5km north east. No World Heritage Sites, Scheduled Monuments, Conservation Areas, Protected Wreck Sites, Battlefields or Parks and Gardens are located within 2km. There is unlikely to be significant adverse effects on designated heritage during construction or operation There is the potential for indirect effects on setting and from noise and vibration on the listed buildings in close proximity during construction. Discovery of unexpected heritage assets is unlikely if the improvements are focused within the existing road network.	Any activities within close proximity which could cause damage or disturbance to these assets, including parking vehicles should be avoided and be managed via a CEMP. Precautions for unexpected heritage discovery during construction. Potential need for archaeological watching brief during construction, particularly in areas not previously developed. Consideration of unexpected heritage discovery in Construction Environmental Management Plans (CEMPs).	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
				Landscape and Visual	Conserve and enhance the natural beauty of Telford and Wrekin’s protected landscapes	The option falls within Mid Severn Sandstone Plateau National Character Area. There are no National Landscapes, National Trails or National Parks within 4km of the scheme.	Use of best practice construction techniques and Construction Environmental Management Plan (CEMP) to ensure that the character	0
Characterisation of effects								
✓	✓	✓	✓					Magnitude

	and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity	No significant effects are anticipated during construction or operation as improvements will largely be limited to the existing interchange.	and quality of landscapes and townscapes are maintained as far as practicable during construction. Opportunities to improve townscape, e.g. through decluttering of signage to be considered during design.	Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Water	Protect and enhance the water environment	The closest DWSZ for surface water is approximately 1km north. There are no WFD Rivers, Canals or Lakes, SPZs, Groundwater DWSZ or Bathing Water sites within 2km of the scheme. Construction is unlikely to have any significant adverse effects on water although there is potential for pollution incidents.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Soil	Protect soil resources and avoid land contamination	The scheme is within Non Agricultural Land. Lilleshall/Lilleshall Works, Snedshill Historic Landfill Site is located approximately 180m north of the scheme. No significant effects are anticipated during construction or operation due to the improvements likely to be largely located on the existing interchange.	Consideration of soil quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring. Use of SuDS and / or conventional pollution control techniques such as petrol interceptors to prevent soil pollution.	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Natural Resources	Promote sustainable use of resources and natural assets	The nearest permitted waste site (Granville Landfill Site) is approximately 2.7km north east. Construction will require resources for the improvements.	Consideration of waste hierarchy and use of recycled or re-used materials in a Site Waste Management Plan (SWMP).	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Economic	Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all	Construction activities will provide/maintain employment opportunities. The scheme may also improve accessibility and connectivity to jobs and skills by reducing delays and enhancing overall network performance.	Provide employment opportunities to unskilled / apprentices at construction stage.	+	0	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Support the wider coordination of land use and energy planning	The scheme is within Telford built up area. The scheme aims to improve the network efficiency for current and future demand and may therefore be beneficial in relation	None identified.	0	0	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude

	across Telford and Wrekin	to coordination of land use, energy planning and transport planning.		Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Social	Improve health and well-being for all citizens and reduce inequalities in health (<i>HIA specific objective</i>)	There may be an increase in air quality emissions during construction which would particularly impact children, elderly and other vulnerable groups including those with respiratory conditions. Where the scheme reduces delays it will improve accessibility and connectivity to services and facilities.	Consideration of air quality in Construction Environmental Management Plans (CEMPs).	0	-	++	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (<i>EqIA specific objective</i>)	Improvements may promote greater equality of opportunity as they would allow for increased reliability and better journey times. Access may be increased to employment opportunities and public services / recreational facilities. However benefits are likely to be greater for those who own a car.	None identified.	0	0	++	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Rural	Promote fairness and equity in rural connectivity (<i>Rural proofing specific objective</i>)	The scheme is not anticipated to improve rural connectivity.	None identified.	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty

Apley Roundabout

Scheme Name		Apley Roundabout						
Scheme Description		Delivery of capacity improvements including extended flares on northbound and southbound approaches, providing 2 lanes on north and southbound exits which merge back to 1 lane, along with new signage and lane markings to reduce delay, improve flow, and enhance overall network performance under current and future demand.						
ISA Topic	ISA Objective	Comment	Mitigation	Residual Construction		Residual Operational		
				Positive Effects	Negative Effects	Positive Effects	Negative Effects	
		There are no AQMAs within 10km of the scheme.		0	--	+	0	

Air Quality & Noise Pollution	Protect and improve air quality	It is anticipated that there will be negative effects on air quality during the construction phase. Significant effects cannot be ruled out. Where the capacity improvements reduce delays and congestion there is likely to be benefits in terms of air quality.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on air quality e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
	Med	Med	Med	Med	Certainty			
	Reduce the impact on environmental noise from transportation sources	The nearest Noise Action Important Area is approximately 100m south east. It is anticipated that there will be negative effects on noise during the construction phase. Significant effects cannot be ruled out. Where the capacity improvements reduce delays and congestion there is likely to be benefits in terms of environmental noise.	Consideration of noise in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on noise e.g., timing of works or ensuring all plant and machinery are switched off when not in use.	0	--	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
Temp				Temp	Perm	Perm	Permanence	
Med				Med	Med	Med	Certainty	
Climate	Reduce carbon emissions from transport and contribute to meeting Telford and Wrekin's goal of carbon neutral by 2030	Construction activities will result in CO2 emissions. Significant effects cannot be ruled out. Where the capacity improvements reduce delays and congestion there is likely to be benefits in terms of CO2 emissions.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise emissions e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	--	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
	Med	Med	Med	Med	Certainty			
	Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding	The scheme does not fall within Flood Zones 2 or 3. There may be an increase in impermeable surface where improvements involve road widening or adding new lanes, which would increase the risk of flooding but it is anticipated that most of works will be within the existing road network and therefore negative effects would not be significant.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMP's). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
ST				ST	LT	LT	Duration	
Temp	Temp	Perm	Perm	Permanence				
Med	Med	Med	Med	Certainty				
Biodiversity	Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	Apley Woods LNR is approximately 0.5km north and Dothill LNR is 0.7km west. The nearest SSSI (The Ercall And Lawrence's Hill) is 2.2km south. There are areas of Deciduous Woodland Priority Habitat adjacent to the roundabout. There is an area of Ancient Woodland approximately 2km south. There are no NNRs, RSPB Reserves, Biosphere Reserves or MCZs within 10km of the scheme. During construction, loss of the adjacent priority habitat is possible. There may also be indirect effects such as noise and light pollution during construction.	Consideration of the timing of construction works in relation to ecological windows and legislative requirements. Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs). Appropriate management of invasive species where applicable.	0	--	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration

		During operation, the project is not anticipated to have significant effects on any designated sites, however indirect effects may be possible. It is to be noted that a reduction in congestion could reduce pressures on habitat and species.	Control of invasive species where necessary.	Temp	Temp	Perm	Perm	Permanence				
				Med	Med	Med	Med	Certainty				
	Protect and enhance sites designated for their international importance for nature conservation purposes (linked to HRA)	There are no SPAs, SACs or Ramsar sites within 10km of the scheme and none are identified as being hydrologically connected. The HRA concludes that the scheme is unlikely to result in significant effects on any European site The scheme is therefore not anticipated to impact on internationally designated sites during construction or operation.	Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs).	0	0	0	0					
				Characterisation of effects								
				✓	✓	✓	✓	Magnitude				
				Local	Local	Local	Local	Scale				
				ST	ST	LT	LT	Duration				
				Temp	Temp	Perm	Perm	Permanence				
				Med	Med	Med	Med	Certainty				
Geodiversity	Protect, enhance and promote geodiversity	No geologically significant features have been identified in proximity to the scheme. The scheme has the potential to affect geodiversity during construction, however if improvements are largely confined to the existing roundabout effects are expected to be limited.	Consideration of geodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs).	0	-	0	0					
				Characterisation of effects								
				✓	✓	✓	✓	Magnitude				
				Local	Local	Local	Local	Scale				
				ST	ST	LT	LT	Duration				
				Temp	Temp	Perm	Perm	Permanence				
								Med	Med	Med	Med	Certainty
				Historic Environment	Protect and enhance cultural heritage assets and their settings, and the wider historic environment	The nearest listed building is '38 Whitchurch Road' (Grade II) located 0.4km south west. Wellington Conservation Area is 0.5km south west. No World Heritage Sites, Scheduled Monuments, Protected Wreck Sites, Battlefields or Parks and Gardens are located within 2km. There is unlikely to be significant adverse effects on designated heritage during construction or operation There is the potential for indirect effects on setting and from noise and vibration on the listed buildings and conservation areas in close proximity during construction. Discovery of unexpected heritage assets is unlikely if the improvements are focused within the existing road network.	Any activities within close proximity which could cause damage or disturbance to these assets, including parking vehicles should be avoided and be managed via a CEMP. Precautions for unexpected heritage discovery during construction. Potential need for archaeological watching brief during construction, particularly in areas not previously developed. Consideration of unexpected heritage discovery in Construction Environmental Management Plans (CEMPs).	0	-	0	0	
Characterisation of effects												
✓	✓	✓	✓					Magnitude				
Local	Local	Local	Local					Scale				
ST	ST	LT	LT					Duration				
Temp	Temp	Perm	Perm					Permanence				
								Med	Med	Med	Med	Certainty
Landscape and Visual	Conserve and enhance the natural beauty of Telford and Wrekin's protected landscapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity	The option falls within Shropshire, Cheshire and Staffordshire Plain National Character Area. The Shropshire Hills National Landscape is 2.3km south. There are no National Trails or National Parks within 30km of the scheme. No significant effects are anticipated during construction or operation as improvements will largely be limited to the existing roundabout and carriageways.	Use of best practice construction techniques and Construction Environmental Management Plan (CEMP) to ensure that the character and quality of landscapes and townscapes are maintained as far as practicable during construction. Opportunities to improve townscape, e.g. through decluttering of signage to be considered during design.					0	-	0	-	
				Characterisation of effects								
				✓	✓	✓	✓	Magnitude				
				Local	Local	Local	Local	Scale				
				ST	ST	LT	LT	Duration				
				Temp	Temp	Perm	Perm	Permanence				
								Med	Med	Med	Med	Certainty

Water	Protect and enhance the water environment	Ketley Brook source to Ketley Flood Meadow WFD river is approximately 1.2km east. The scheme is within a DWSZ for surface water. SPZ 1,2 and 3 are approximately 0.9km south of the scheme. There are no, WFD Canals or Lakes, Groundwater DWSZ or Bathing Water sites within 5km of the scheme. Construction is unlikely to have any significant adverse effects on water although there is potential for pollution incidents.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.	0	-	0	0	Magnitude Scale Duration Permanence Certainty
				Characterisation of effects				
				✓	✓	✓	✓	
				Local	Local	Local	Local	
				ST	ST	LT	LT	
				Temp	Temp	Perm	Perm	
				Med	Med	Med	Med	
Soil	Protect soil resources and avoid land contamination	The scheme is within Grade 2 Agricultural land, which is considered to be Best and Most Versatile (BMV). Whitchurch Drive Historic Landfill Site is located 1km south east of the scheme. Whilst there is potential for loss of BMV land during construction where the carriageway may be widened but as it is within an existing built up area, significant effects are not anticipated.	Consideration of soil quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring. Use of SuDS and / or conventional pollution control techniques such as petrol interceptors to prevent soil pollution.	0	-	0	0	Magnitude Scale Duration Permanence Certainty
				Characterisation of effects				
				✓	✓	✓	✓	
				Local	Local	Local	Local	
				ST	ST	LT	LT	
				Temp	Temp	Perm	Perm	
				Med	Med	Med	Med	
Natural Resources	Promote sustainable use of resources and natural assets	The nearest permitted waste site (Sinclair Works) is approximately 2.2km south east. Construction will require resources for the improvements.	Consideration of waste hierarchy and use of recycled or re-used materials in a Site Waste Management Plan (SWMP).	0	-	0	0	Magnitude Scale Duration Permanence Certainty
				Characterisation of effects				
				✓	✓	✓	✓	
				Local	Local	Local	Local	
				ST	ST	LT	LT	
				Temp	Temp	Perm	Perm	
				Med	Med	Med	Med	
Economic	Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all	Construction activities will provide/maintain employment opportunities. The scheme may also improve accessibility and connectivity to jobs and skills by reducing delays and enhancing overall network performance.	Provide employment opportunities to unskilled / apprentices at construction stage.	+	0	++	0	Magnitude Scale Duration Permanence Certainty
				Characterisation of effects				
				✓	✓	✓	✓	
				Local	Local	Local	Local	
				ST	ST	LT	LT	
				Temp	Temp	Perm	Perm	
				Med	Med	Med	Med	
	Support the wider coordination of land use and energy planning across Telford and Wrekin	The scheme is within Telford built up area. The scheme aims to improve the network efficiency for current and future demand and may therefore be beneficial in relation to coordination of land use, energy planning and transport planning.	None identified.	0	0	+	0	Magnitude Scale Duration Permanence Certainty
				Characterisation of effects				
				✓	✓	✓	✓	
				Local	Local	Local	Local	
				ST	ST	LT	LT	
				Temp	Temp	Perm	Perm	
				Med	Med	Med	Med	

Social	Improve health and well-being for all citizens and reduce inequalities in health <i>(HIA specific objective)</i>	There may be an increase in air quality emissions during construction which would particularly impact children, elderly and other vulnerable groups including those with respiratory conditions. It is noted that Charlton School and the Princess Royal Hospital are within 0.2km of the roundabout. Where the scheme reduces delays it will improve accessibility and connectivity to services and facilities including the nearby hospital.	Consideration of air quality in Construction Environmental Management Plans (CEMPs).	0	-	++	-		
				Characterisation of effects					
				✓	✓	✓	✓		Magnitude
				Local	Local	Local	Local		Scale
				ST	ST	LT	LT		Duration
				Temp	Temp	Perm	Perm		Permanence
				Med	Med	Med	Med		Certainty
	Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society <i>(EqIA specific objective)</i>	Improvements may promote greater equality of opportunity as they would allow for increased reliability and better journey times. Access may be increased to employment opportunities and public services / recreational facilities. However benefits are likely to be greater for those who own a car.	None identified.	0	0	++	-		
				Characterisation of effects					
				✓	✓	✓	✓		Magnitude
				Local	Local	Local	Local		Scale
				ST	ST	LT	LT		Duration
				Temp	Temp	Perm	Perm		Permanence
				Med	Med	Med	Med		Certainty
Rural	Promote fairness and equity in rural connectivity <i>(Rural proofing specific objective)</i>	The scheme is not anticipated to improve rural connectivity.	None identified.	0	0	0	0		
				Characterisation of effects					
				✓	✓	✓	✓		Magnitude
				Local	Local	Local	Local		Scale
				ST	ST	LT	LT		Duration
				Temp	Temp	Perm	Perm		Permanence
				Med	Med	Med	Med		Certainty

Haybridge Roundabout

Scheme Name		Haybridge Roundabout					
Scheme Description		Delivery of capacity improvements including extended flares on northbound and southbound approaches, providing 2 lanes on north and southbound exits which merge back to 1 lane, along with new signage and lane markings to reduce delay, improve flow, and enhance overall network performance under current and future demand.					
ISA Topic	ISA Objective	Comment	Mitigation	Residual Construction		Residual Operational	
				Positive Effects	Negative Effects	Positive Effects	Negative Effects
Air Quality & Noise Pollution	Protect and improve air quality	There are no AQMAs within 15km of the scheme. It is anticipated that there will be negative effects on air quality during the construction phase. Significant effects cannot be ruled out. Where the capacity improvements reduce delays and congestion there is likely to be benefits in terms of air quality.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on air quality e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	--	+	0
				Characterisation of effects			
				✓	✓	✓	✓
				Local	Local	Local	Local
				ST	ST	LT	LT
				Temp	Temp	Perm	Perm

				Med	Med	Med	Med	Certainty
	Reduce the impact on environmental noise from transportation sources	The nearest Noise Action Important Area is 0.8km south east. It is anticipated that there will be negative effects on noise during the construction phase. Significant effects cannot be ruled out. Where the capacity improvements reduce delays and congestion there is likely to be benefits in terms of environmental noise.	Consideration of noise in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on noise e.g., timing of works or ensuring all plant and machinery are switched off when not in use.	0	--	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Climate	Reduce carbon emissions from transport and contribute to meeting Telford and Wrekin's goal of carbon neutral by 2030	Construction activities will result in CO2 emissions. Significant effects cannot be ruled out. Where the capacity improvements reduce delays and congestion there is likely to be benefits in terms of CO2 emissions.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise emissions e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	--	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding	The scheme does not fall within Flood Zones 2 or 3. There may be an increase in impermeable surface where improvements involve road widening or adding new lanes, which would increase the risk of flooding but it is anticipated that most of works will be within the existing road network and therefore negative effects would not be significant.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMP's). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Biodiversity	Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	The nearest LNR (Ketley Paddock Mound) is approximately 1.5km south east and New Hadley Brickpit SSSI is 1.5km east. There are areas of Deciduous Woodland Priority Habitat within 0.1km of the roundabout. There is an area of Ancient Woodland approximately 1.8km south. There are no NNRs, RSPB Reserves, Biosphere Reserves or MCZs within 10km of the scheme. During construction, may be indirect effects such as noise and light pollution on nearby habitats and species. During operation, the project is not anticipated to have significant effects on any designated sites, however indirect effects may be possible. It is to be noted that a reduction in congestion could reduce pressures on habitat and species.	Consideration of the timing of construction works in relation to ecological windows and legislative requirements. Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs). Appropriate management of invasive species where applicable. Control of invasive species where necessary.	0	-	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Protect and enhance sites designated for their international importance for nature	There are no SPAs, SACs or Ramsar sites within 10km of the scheme and none are identified as being hydrologically connected.	Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs).	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude

	conservation purposes (linked to HRA)	The HRA concludes that the scheme is unlikely to result in significant effects on any European site The scheme is therefore not anticipated to impact on internationally designated sites during construction or operation.		Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Geodiversity	Protect, enhance and promote geodiversity	No geologically significant features have been identified in proximity to the scheme. The scheme has the potential to affect geodiversity during construction, however if improvements are largely confined to the existing roundabout effects are expected to be limited.	Consideration of geodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs).	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Historic Environment	Protect and enhance cultural heritage assets and their settings, and the wider historic environment	The nearest listed building is 'Milepost Approximately 300 Yards East South East Of Football Ground' (Grade II) located 0.4km south. No World Heritage Sites, Scheduled Monuments, Conservation Areas, Protected Wreck Sites, Battlefields or Parks and Gardens are located within 2km. There is unlikely to be significant adverse effects on designated heritage during construction or operation There is the potential for indirect effects on setting and from noise and vibration on the listed buildings in close proximity during construction. Discovery of unexpected heritage assets is unlikely if the improvements are focused within the existing road network.	Any activities within close proximity which could cause damage or disturbance to these assets, including parking vehicles should be avoided and be managed via a CEMP. Precautions for unexpected heritage discovery during construction. Potential need for archaeological watching brief during construction, particularly in areas not previously developed. Consideration of unexpected heritage discovery in Construction Environmental Management Plans (CEMPs).	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Landscape and Visual	Conserve and enhance the natural beauty of Telford and Wrekin's protected landscapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity	The option falls within Shropshire, Cheshire and Staffordshire Plain National Character Area. The Shropshire Hills National Landscape is 1.9km south east. There are no National Trails or National Parks within 30km of the scheme. No significant effects are anticipated during construction or operation as improvements will largely be limited to the existing roundabout and carriageways.	Use of best practice construction techniques and Construction Environmental Management Plan (CEMP) to ensure that the character and quality of landscapes and townscapes are maintained as far as practicable during construction. Opportunities to improve townscape, e.g. through decluttering of signage to be considered during design.	0	-	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Water	Protect and enhance the water environment	Ketley Brook source to Ketley Flood Meadow WFD river is approximately 0.3km east. The scheme is within a DWSZ for surface water and SPZ 3. There are no WFD Canals or Lakes, Groundwater DWSZ or Bathing Water sites within 4km of the scheme. Construction is unlikely to have any significant adverse effects on water although there is potential for pollution incidents.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence

				Med	Med	Med	Med	Certainty	
Soil	Protect soil resources and avoid land contamination	The scheme is within Urban land. Bucks Head and Keltey Sands Historic Landfill Sites are located 0.2km from the roundabout. There is potential for adverse effects in terms of disturbance to contaminated land if construction works intrude on to the historic landfill sites.	Consideration of soil quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring. Use of SuDS and / or conventional pollution control techniques such as petrol interceptors to prevent soil pollution.	0	--	0	0		
				Characterisation of effects					
				✓	✓	✓	✓	Magnitude	
				Local	Local	Local	Local	Scale	
				ST	ST	LT	LT	Duration	
				Temp	Temp	Perm	Perm	Permanence	
				Med	Med	Med	Med	Certainty	
Natural Resources	Promote sustainable use of resources and natural assets	The nearest permitted waste site (Sinclair Works) is approximately 0.7km south east. Construction will require resources for the improvements.	Consideration of waste hierarchy and use of recycled or re-used materials in a Site Waste Management Plan (SWMP).	0	-	0	0		
				Characterisation of effects					
				✓	✓	✓	✓	Magnitude	
				Local	Local	Local	Local	Scale	
				ST	ST	LT	LT	Duration	
				Temp	Temp	Perm	Perm	Permanence	
				Med	Med	Med	Med	Certainty	
Economic	Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all	Construction activities will provide/maintain employment opportunities. The scheme may also improve accessibility and connectivity to jobs and skills by reducing delays and enhancing overall network performance.	Provide employment opportunities to unskilled / apprentices at construction stage.	+	0	++	0		
				Characterisation of effects					
				✓	✓	✓	✓	Magnitude	
				Local	Local	Local	Local	Scale	
				ST	ST	LT	LT	Duration	
				Temp	Temp	Perm	Perm	Permanence	
				Med	Med	Med	Med	Certainty	
	Support the wider coordination of land use and energy planning across Telford and Wrekin	The scheme is within Telford built up area. The scheme aims to improve the network efficiency for current and future demand and may therefore be beneficial in relation to coordination of land use, energy planning and transport planning.	None identified.		0	0	+	0	
					Characterisation of effects				
					✓	✓	✓	✓	Magnitude
					Local	Local	Local	Local	Scale
					ST	ST	LT	LT	Duration
					Temp	Temp	Perm	Perm	Permanence
					Med	Med	Med	Med	Certainty
Social	Improve health and well-being for all citizens and reduce inequalities in health <i>(HIA specific objective)</i>	There may be an increase in air quality emissions during construction which would particularly impact children, elderly and other vulnerable groups including those with respiratory conditions. Where the scheme reduces delays it will improve accessibility and connectivity to services and facilities.	Consideration of air quality in Construction Environmental Management Plans (CEMPs).	0	-	++	-		
				Characterisation of effects					
				✓	✓	✓	✓	Magnitude	
				Local	Local	Local	Local	Scale	
				ST	ST	LT	LT	Duration	
				Temp	Temp	Perm	Perm	Permanence	

				Med	Med	Med	Med	Certainty
	Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (<i>EqIA specific objective</i>)	Improvements may promote greater equality of opportunity as they would allow for increased reliability and better journey times. Access may be increased to employment opportunities and public services / recreational facilities. However benefits are likely to be greater for those who own a car.	None identified.	0	0	++	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Rural	Promote fairness and equity in rural connectivity (<i>Rural proofing specific objective</i>)	The scheme is not anticipated to improve rural connectivity.	None identified.	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty

A518 Corridor Improvement Scheme

Scheme Name		A518 Corridor Improvement Scheme						
Scheme Description		A integrated package of infrastructure, operational and safety interventions designed to improve performance, capacity and connectivity along the corridor between Telford and Newport.						
ISA Topic	ISA Objective	Comment	Mitigation	Residual Construction		Residual Operational		
				Positive Effects	Negative Effects	Positive Effects	Negative Effects	
Air Quality & Noise Pollution	Protect and improve air quality	There are no AQMAs within 15km of the scheme. It is anticipated that there will be negative effects on air quality during the construction phase. Significant effects cannot be ruled out. Where the capacity improvements reduce delays and congestion there is likely to be benefits in terms of air quality. Introduction of cycleways may encourage a move to more sustainable transport, which would reduce emissions.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on air quality e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	--	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Reduce the impact on environmental noise from transportation sources	The scheme intersects a Noise Action Important Area. It is anticipated that there will be negative effects on noise during the construction phase. Significant effects cannot be ruled out. Where the capacity improvements reduce delays and congestion there is likely to be benefits in terms of environmental noise. Introduction of cycleways may	Consideration of noise in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on noise e.g., timing of works or ensuring all plant and machinery are switched off when not in use.	0	--	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration

		encourage a move to more sustainable transport, which would reduce noise associated with cars.		Temp	Temp	Perm	Perm	Permanence			
				Med	Med	Med	Med	Certainty			
Climate	Reduce carbon emissions from transport and contribute to meeting Telford and Wrekin’s goal of carbon neutral by 2030	Construction activities will result in CO2 emissions. Significant effects cannot be ruled out. Where the capacity improvements reduce delays and congestion there may be slight benefits in terms of CO2 emissions. Introduction of cycleways may encourage a move to more sustainable transport, which would reduce carbon emissions associated with the use of private cars, although the nature of these modes means that the actual quantification of effect might be marginal.	Consideration of air quality in Construction Environmental Management Plans (CEMP’s). Construction techniques to minimise emissions e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	--	+	0				
				Characterisation of effects							
				✓	✓	✓	✓	Magnitude			
				Local	Local	Local	Local	Scale			
				ST	ST	LT	LT	Duration			
				Temp	Temp	Perm	Perm	Permanence			
	Med	Med	Med	Med	Certainty						
	Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding	The scheme is adjacent to small areas of Flood Zones 2 and 3. There may be an increase in impermeable surface where improvements involve road widening or adding new lanes, which would increase the risk of flooding but it is anticipated that most of works will be within the existing road network and therefore negative effects would not be significant.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMP’s). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.	0	-	0	0				
				Characterisation of effects							
				✓	✓	✓	✓	Magnitude			
				Local	Local	Local	Local	Scale			
				ST	ST	LT	LT	Duration			
Temp				Temp	Perm	Perm	Permanence				
Med	Med	Med	Med	Certainty							
Biodiversity	Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	The nearest LNR (Lilleshall Hill) is approximately 0.3km south and Newport Canal SSSI is 1.4km north. The nearest NNR (Aqualate Mere) is approximately 1.7km north east. There are areas of Deciduous Woodland Priority Habitat adjacent to the scheme. There is an area of Ancient Woodland approximately 1.4km north east. There are no RSPB Reserves, Biosphere Reserves or MCZs within 30km of the scheme. During construction, there is potential for loss of priority habitat where carriageway widening encroaches into the designated areas. There may also be indirect effects such as noise and light pollution on nearby habitats and species. During operation, the project is not anticipated to have significant effects on any designated sites, however indirect effects may be possible. It is to be noted that a reduction in congestion and a move towards active travel could reduce pressures on habitat and species.	Consideration of the timing of construction works in relation to ecological windows and legislative requirements. Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs). Appropriate management of invasive species where applicable. Control of invasive species where necessary.	0	--	+	0				
				Characterisation of effects							
				✓	✓	✓	✓	Magnitude			
				Local	Local	Local	Local	Scale			
				ST	ST	LT	LT	Duration			
				Temp	Temp	Perm	Perm	Permanence			
				Med	Med	Med	Med	Certainty			
				Protect and enhance sites designated for their international importance for nature conservation purposes (linked to HRA)	Midland Meres & Mosses Phase 2 Ramsar site is 1.8km north east and Motte Meadows is 9.8km east. There are no SPAs within 40km of the scheme. While the scheme is located approximately 1.8km south west of the Midland Meres and Mosses Phase 2 Ramsar site, the HRA concludes that provided the protective policies and mitigations set out in the TWTP Vision and Strategy Habitats Regulations Assessment are adhered to, including the need for project-level assessment, it is considered that adverse effects on the integrity of the	Consideration of the timing of construction works in relation to ecological windows and legislative requirements. Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs). Further investigation may be required through an HRA.	0	--	+	0	
							Characterisation of effects				
							✓	✓	✓	✓	Magnitude
							Local	Local	Local	Local	Scale
							ST	ST	LT	LT	Duration
	Temp	Temp	Perm				Perm	Permanence			

		Midland Meres and Mosses Phase 2 Ramsar site could reasonably be avoided. During construction, the potential for significant adverse effects on designated sites in proximity to the scheme cannot be ruled out with the information available for this assessment. During operation the project is not anticipated to have significant effects on any of the designated sites noted, though may reduce pressures as a result of any reduced traffic (e.g. through noise, light and air emissions).		Med	Med	Med	Med	Certainty
Geodiversity	Protect, enhance and promote geodiversity	No geologically significant features have been identified in proximity to the scheme. The scheme has the potential to affect geodiversity during construction, however if improvements are largely confined to the route of the existing carriageway effects are expected to be limited.	Consideration of geodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs).	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Historic Environment	Protect and enhance cultural heritage assets and their settings, and the wider historic environment	There are six Grade II and one Grade II* within 0.4km of the scheme. Newport Conservation Area is 0.7km north and Lilleshall Hall Registered Park and Garden is 0.8km south. 'Enclosed Iron Age farmstead immediately adjacent to The Croft, Pave Lane' Scheduled Monument is 1.2km south. No World Heritage Sites, Protected Wreck Sites or Battlefields are located within 10km. There is unlikely to be significant adverse effects on designated heritage during construction or operation There is the potential for indirect effects on setting and from noise and vibration on the listed buildings in close proximity during construction. Discovery of unexpected heritage assets is unlikely if the improvements are focused within the existing road network.	Any activities within close proximity which could cause damage or disturbance to these assets, including parking vehicles should be avoided and be managed via a CEMP. Precautions for unexpected heritage discovery during construction. Potential need for archaeological watching brief during construction, particularly in areas not previously developed. Consideration of unexpected heritage discovery in Construction Environmental Management Plans (CEMPs).	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Landscape and Visual	Conserve and enhance the natural beauty of Telford and Wrekin's protected landscapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity	The option falls within Shropshire, Cheshire and Staffordshire Plain and Mid Severn Sandstone Plateau National Character Areas. The Shropshire Hills National Landscape is 9km south west. There are no National Trails or National Parks within 30km of the scheme. No significant effects are anticipated during construction or operation as improvements will largely follow the route of the existing carriageway.	Use of best practice construction techniques and Construction Environmental Management Plan (CEMP) to ensure that the character and quality of landscapes and townscapes are maintained as far as practicable during construction. Opportunities to improve townscape, e.g. through decluttering of signage to be considered during design.	0	-	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Water	Protect and enhance the water environment	Wall Bk - source to conf Pipe Strine WFD river is approximately 0.6km south west. The scheme is within a DWSZ for surface water, almost entirely within SPZ 3 and intersects SPZ 2. There are no WFD Canals or Lakes, Groundwater DWSZ or Bathing Water sites within 2km of the scheme.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMPs).	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale

		Construction is unlikely to have any significant adverse effects on water although there is potential for pollution incidents.	Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.	ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Soil	Protect soil resources and avoid land contamination	The scheme is almost entirely within Grade 2 Agricultural Land, with a minor intersection of Grade 3 land. Grades 1-3a are categorised as Best and Most Versatile (BMV) land. 'Newport Bypass, Urbangrand Limited Newport Bypass' Historic Landfill Site is adjacent to the scheme. There are four other historic landfill sites within 0.3km. There is potential for adverse effects in terms of disturbance to contaminated land if construction works intrude on to the historic landfill sites. There may be potential to remediate contaminated land although any effects are likely to be minor. There is also potential for loss of BMV, although this expected to be relatively limited where works largely follow the route of the existing carriageway.	Consideration of soil quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring. Use of SuDS and / or conventional pollution control techniques such as petrol interceptors to prevent soil pollution. Remediation of land contamination if in existence.	0	--	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Natural Resources	Promote sustainable use of resources and natural assets	The nearest permitted waste site (Granville Transfer And Treatment Facility) is approximately 3km south. Construction will require resources for the improvements. The option may encourage sustainable forms of transport during operation.	Consideration of waste hierarchy and use of recycled or re-used materials in a Site Waste Management Plan (SWMP).	0	-	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
Economic	Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all	Construction activities will provide/maintain employment opportunities. The scheme may also improve accessibility and connectivity to jobs and skills by improving performance, capacity and connectivity as well as through the provision of a cycleway, between Telford and Newport.	Provide employment opportunities to unskilled / apprentices at construction stage.	+	0	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
	Support the wider coordination of land use and energy planning across Telford and Wrekin	The scheme intersects small areas of Lilleshall and Newport (Telford and Wrekin) built up areas. The scheme aims to improve connectivity between Telford and Newport and may therefore be beneficial in relation to coordination of land use, energy planning and transport planning.	None identified.	0	0	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
Social	Improve health and well-being for all	There may be an increase in air quality emissions during construction which would particularly impact children,		0	-	++	0	
				Characterisation of effects				

	citizens and reduce inequalities in health <i>(HIA specific objective)</i>	elderly and other vulnerable groups including those with respiratory conditions. The scheme aims to improve connectivity along the corridor between Telford and Newport and it will therefore improve accessibility and connectivity to services and facilities. The provision of cycle routes will make this mode of transport more accessible and safer for wider and vulnerable groups.	Consideration of air quality in Construction Environmental Management Plans (CEMPs).	✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society <i>(EqIA specific objective)</i>	Improvements may promote greater equality of opportunity as they would allow for increased reliability and better journey times. Access may be increased to employment opportunities and public services / recreational facilities. However benefits are likely to be greater for those who own a car. The provision of cycle routes will make this mode of transport more accessible and safer for wider and vulnerable groups. However, some groups including disabled, elderly and pregnant women may not benefit from the intervention.	None identified.	0	0	++	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
Temp				Temp	Perm	Perm	Permanence	
Med				Med	Med	Med	Certainty	
Rural	Promote fairness and equity in rural connectivity <i>(Rural proofing specific objective)</i>	The scheme aims to approve connectivity along the corridor between Telford and Newport which is largely in a rural area. This may ultimately increase rural connectivity.	None identified.	0	0	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty

A442 Northern Arc Capacity Improvement Scheme - Trench Lock Interchange

Scheme Name		A442 Northern Arc Capacity Improvement Scheme – Trench Lock Interchange						
Scheme Description		Delivery of Trench Lock Interchange capacity improvement scheme which is a targeted set of engineering and traffic-management interventions designed to reduce delay, improve flow, and enhance overall network performance under current and future demand.						
ISA Topic	ISA Objective	Comment	Mitigation	Residual Construction		Residual Operational		
				Positive Effects	Negative Effects	Positive Effects	Negative Effects	
Air Quality & Noise Pollution	Protect and improve air quality	There are no AQMAs within 10km of the scheme. It is anticipated that there will be negative effects on air quality during the construction phase. During operation it is anticipated there will be reduced traffic congestion and therefore reduced air emissions, however if the improvements result in increased traffic in the area there may be negative effects.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on air quality e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	--	+	-	
				Characterisation of effects				
				✓	✓	✓	✓	
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
Med	Med	Med	Med	Certainty				

	Reduce the impact on environmental noise from transportation sources	The nearest Noise Action Important Area is intersected with the scheme. It is anticipated that there will be negative effects on noise during the construction phase. During operation it is anticipated there will be reduced traffic congestion and therefore reduced air emissions, however if the improvements result in increased traffic in the area there may be negative effects.	Consideration of noise in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on noise e.g., timing of works or ensuring all plant and machinery are switched off when not in use.	0	--	+	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Climate	Reduce carbon emissions from transport and contribute to meeting Telford and Wrekin's goal of carbon neutral by 2030	Construction activities will result in CO2 emissions. During operation the use of vehicles will continue and therefore there will not be a significant reduction in CO2 emissions, although a reduction in congestion may result in a slight reduction in emissions. However, if the improvements result in increased traffic in the area there may be negative effects in terms of emissions.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise emissions e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	--	+	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding	The scheme does not fall within any Flood Zones. There may be an increase in impermeable surface where improvements involve road widening or adding new lanes for example, which would increase the risk of flooding but it is anticipated that most of works will be within the existing road network and therefore negative effects would not be significant.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMP's). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.	0	-	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Biodiversity	Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	The closest LNR (Ketley Paddock Mound) is approximately 1.4km south. New Hadley Brickpit SSSI is located 0.6km south. There are parcels of Deciduous Woodland Priority Habitat which is within the option. There are no SSSIs, Ancient Woodlands, NNRs, RSPB Reserves, Biosphere Reserves or MCZs within 2km of the scheme. Construction could lead to the loss of priority habitat and indirect effects on priority habitats such as noise and light pollution. During operation, the project is not anticipated to have significant effects on any designated sites, however indirect effects may be possible. It is to be noted that a reduction in congestion could reduce pressures on habitat and species, while if improvements lead to increased traffic volumes there may be negative effects.	Consideration of the timing of construction works in relation to ecological windows and legislative requirements. Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs). Appropriate management of invasive species where applicable. Control of invasive species where necessary.	0	--	+	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Protect and enhance sites designated for their international importance for nature	There are no SPAs, SACs or Ramsar sites within 10km of the scheme and none are identified as being hydrologically connected.	Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs).	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude

	conservation purposes (linked to HRA)	The HRA concludes that the scheme is unlikely to result in significant effects on any European site The scheme is therefore not anticipated to impact on internationally designated sites during construction or operation.		Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Geodiversity	Protect, enhance and promote geodiversity	New Hadley Brickpit SSSI is located 0.6km south and is designated principally for its geological value. The scheme has the potential to affect geodiversity during construction, however if improvements are confined to the existing interchange effects are expected to be limited.	Consideration of geodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs).	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Historic Environment	Protect and enhance cultural heritage assets and their settings, and the wider historic environment	The nearest listed building is 'Hadley Park Windmill' (Grade II) located 0.8km west. The Scheduled Monument 'St Leonard's Priory immediately adjacent the Church of St Mary and St Leonard, Wombridge' is located 1.0km south of the scheme. No World Heritage Sites, Conservation Areas, Protected Wreck Sites, Parks and Gardens or Battlefields are located within 2km. There is unlikely to be significant adverse effects on designated heritage during construction or operation There is the potential for indirect effects on setting and from noise and vibration on the listed buildings in close proximity during construction. Discovery of unexpected heritage assets is unlikely if the improvements are focused within the existing road network.	Any activities within close proximity which could cause damage or disturbance to these assets, including parking vehicles should be avoided and be managed via a CEMP. Precautions for unexpected heritage discovery during construction. Potential need for archaeological watching brief during construction, particularly in areas not previously developed. Consideration of unexpected heritage discovery in Construction Environmental Management Plans (CEMPs).	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Landscape and Visual	Conserve and enhance the natural beauty of Telford and Wrekin's protected landscapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity	The option falls within Shropshire, Cheshire and Staffordshire Plain National Character Area and Mid Severn Sandstone Plateau National Character Area. There are no National Landscapes, National Trails or National Parks within 4km of the scheme. The scheme involves improvements to existing infrastructure and is unlikely to have significant effects on National Character Areas. The improvements could lead to the loss of priority habitat and indirect effects on priority habitats leading to a reduction in landscape value.	Use of best practice construction techniques and Construction Environmental Management Plan (CEMP) to ensure that the character and quality of landscapes and townscapes are maintained as far as practicable during construction. Opportunities to improve townscape, e.g. through decluttering of signage to be considered during design.	0	-	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Water	Protect and enhance the water environment	The closest DWSZ for surface water is within the scheme. The WFD River 'Ketley Brook source to Ketley Flood Meadow' is located 1.5km west of the option. The scheme lies within a Zone 3 SPZ. There are no WFD Canals or Lakes, Groundwater DWSZ or Bathing Water sites within 2km of the scheme. Construction has the potential to have adverse effects on the intersected DWSZ and SPZ. If the improvement increases the number of vehicles using the road there	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.	0	-	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale

		may be an increased risk for pollution to the water environment during operation through run off or tyre wear and it is likely that WFD assessment would be required to fully understand risks through construction and operational activities.		ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Soil	Protect soil resources and avoid land contamination	The scheme is located within both Urban Land and Grade 3 Agricultural Land. Sommerfield Road, Trench Historic Landfill Site is located approximately 0.6km south of the scheme. No significant effects are anticipated during construction or operation due to the improvements likely to be largely located on existing infrastructure. There may be the potential to disturb or remediate contaminated land due to the proximity to a historic landfill site, although due to the works being improvements to existing infrastructure any effects are anticipated to be minor.	Consideration of soil quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring. Use of SuDS and / or conventional pollution control techniques such as petrol interceptors to prevent soil pollution.	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Natural Resources	Promote sustainable use of resources and natural assets	The nearest permitted waste site (New Acres Landfill Site) is approximately 0.4km south. Construction will require resources for the improvements. No effects during operation are anticipated.	Consideration of waste hierarchy and use of recycled or re-used materials in a Site Waste Management Plan (SWMP).	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Economic	Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all	Construction activities will provide/maintain employment opportunities. The scheme may also improve accessibility and connectivity to jobs and skills by reducing delays and enhancing overall network performance by reducing congestion.	Provide employment opportunities to unskilled / apprentices at construction stage.	+	0	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Support the wider coordination of land use and energy planning across Telford and Wrekin	The scheme is within proximity to the Telford built up area. The scheme aims to improve the network efficiency for current and future demand and may therefore be beneficial in relation to coordination of land use, energy planning and transport planning.	None identified.	0	0	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Social	Improve health and well-being for all citizens and reduce	There may be an increase in air quality emissions during construction which would particularly impact children, elderly and other vulnerable groups including those with respiratory conditions.	Consideration of air quality in Construction Environmental Management Plans (CEMPs).	0	-	+	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude

	inequalities in health (<i>HIA specific objective</i>)	Wider and vulnerable groups would be benefitted during operation of this intervention due to reduced traffic congestion, however if the improvements result in increased traffic in the area there may be negative effects.		Local	Local	Local	Local	Scale
	Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (<i>EqIA specific objective</i>)	There may be an increase in air quality emissions during construction which may particularly impact children, elderly and other vulnerable groups including those with respiratory conditions. The improvements may promote greater equality of opportunity as they would allow for increased connectivity and better journey times. The scheme will primarily benefit those in ownership of cars and have limited benefits for those in lower income groups who do not own cars.		ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
				0	-	++	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
	Temp	Temp		Perm	Perm	Permanence		
Med	Med	Med	Med	Certainty				
Rural	Promote fairness and equity in rural connectivity (<i>Rural proofing specific objective</i>)	The scheme is not anticipated to improve rural connectivity.	None identified.	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty

A442 Northern Arc Capacity Improvement Scheme - Hadley Park Roundabout and Yew Tree Junction

Scheme Name		A442 Northern Arc Capacity Improvement Scheme – Hadley Park Roundabout and Yew Tree Junction					
Scheme Description		Delivery of Hadley Park round about and Yew Tree junction capacity improvement scheme which is a targeted set of engineering and traffic-management interventions designed to reduce delay, improve flow, and enhance overall network performance under current and future demand.					
ISA Topic	ISA Objective	Comment	Mitigation	Residual Construction		Residual Operational	
				Positive Effects	Negative Effects	Positive Effects	Negative Effects
Air Quality & Noise Pollution	Protect and improve air quality	There are no AQMAs within 10km of the scheme. It is anticipated that there will be negative effects on air quality during the construction phase. During operation it is anticipated there will be reduced traffic congestion and therefore reduced air emissions, however if the improvements result in increased traffic in the area there may be negative effects.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on air quality e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	--	+	-
				Characterisation of effects			
				✓	✓	✓	✓
				Local	Local	Local	Local
				ST	ST	LT	LT
				Temp	Temp	Perm	Perm
				Med	Med	Med	Med
	Reduce the impact on environmental noise	The nearest Noise Action Important Area is located 0.2km east. It is anticipated that there will be negative effects on noise during the construction phase.	Consideration of noise in Construction Environmental Management Plans (CEMP's).	0	--	+	-
				Characterisation of effects			

	from transportation sources	During operation it is anticipated there will be reduced traffic congestion and therefore reduced air emissions, however if the improvements result in increased traffic in the area there may be negative effects.	Construction techniques to minimise the impact on noise e.g., timing of works or ensuring all plant and machinery are switched off when not in use.	✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Climate	Reduce carbon emissions from transport and contribute to meeting Telford and Wrekin’s goal of carbon neutral by 2030	Construction activities will result in CO2 emissions. During operation the use of vehicles will continue and therefore there will not be a significant reduction in CO2 emissions, although a reduction in congestion may result in a slight reduction in emissions. However, if the improvements result in increased traffic in the area there may be negative effects in terms of emissions.	Consideration of air quality in Construction Environmental Management Plans (CEMP’s). Construction techniques to minimise emissions e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	--	+	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding	The scheme does not fall within Flood Zones 2 or 3 however there is both Flood Zones 2 and 3 located approximately 40m west of the eastern extent of the option. There may be an increase in impermeable surface where improvements involve road widening or adding new lanes for example, which would increase the risk of flooding but it is anticipated that most of works will be within the existing road network and therefore negative effects would not be significant.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMP’s). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.	0	-	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Biodiversity	Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	The closest LNR (Apley Woods) is approximately 0.8km south west. There is a parcel of Deciduous Woodland Priority Habitat which intersects the option. There are no SSSIs, Ancient Woodlands, NNRs, RSPB Reserves, Biosphere Reserves or MCZs within 2km of the scheme. Construction could lead to the loss of priority habitat and indirect effects on priority habitats such as noise and light pollution. During operation, the project is not anticipated to have significant effects on any designated sites, however indirect effects may be possible. It is to be noted that a reduction in congestion could reduce pressures on habitat and species, while if improvements lead to increased traffic volumes there may be negative effects.	Consideration of the timing of construction works in relation to ecological windows and legislative requirements. Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs). Appropriate management of invasive species where applicable. Control of invasive species where necessary.	0	--	+	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Protect and enhance sites designated for their international importance for nature conservation purposes (linked to HRA)	There are no SPAs, SACs or Ramsar sites within 10km of the scheme and none are identified as being hydrologically connected. The HRA concludes that the scheme is unlikely to result in significant effects on any European site The scheme is therefore not anticipated to impact on internationally designated sites during construction or operation.	Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs).	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence

				Med	Med	Med	Med	Certainty
Geodiversity	Protect, enhance and promote geodiversity	There are no SSSIs designated for geological significance in close proximity to the option. The scheme is not anticipated to affect geodiversity during construction or operation.	Consideration of geodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs).	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Historic Environment	Protect and enhance cultural heritage assets and their settings, and the wider historic environment	The nearest listed building is 'Hadley Park Windmill' (Grade II) located 120m west. The Scheduled Monument 'Wappenshall canal bridge, Shropshire Union Canal' is located 1.2km north west of the scheme. No World Heritage Sites, Conservation Areas, Protected Wreck Sites, Parks and Gardens or Battlefields are located within 2km. There is unlikely to be significant adverse effects on designated heritage during construction or operation There is the potential for indirect effects on setting and from noise and vibration on the listed buildings in close proximity during construction. Discovery of unexpected heritage assets is unlikely if the improvements are focused within the existing road network.	Any activities within close proximity which could cause damage or disturbance to these assets, including parking vehicles should be avoided and be managed via a CEMP. Precautions for unexpected heritage discovery during construction. Potential need for archaeological watching brief during construction, particularly in areas not previously developed. Consideration of unexpected heritage discovery in Construction Environmental Management Plans (CEMPs).	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Landscape and Visual	Conserve and enhance the natural beauty of Telford and Wrekin's protected landscapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity	The option falls within Shropshire, Cheshire and Staffordshire Plain National Character Area. There are no National Landscapes, National Trails or National Parks within 4km of the scheme. The scheme involves improvements to existing infrastructure and is unlikely to have significant effects on National Character Areas. The improvements could lead to the loss of priority habitat and indirect effects on priority habitats leading to a reduction in landscape value.	Use of best practice construction techniques and Construction Environmental Management Plan (CEMP) to ensure that the character and quality of landscapes and townscapes are maintained as far as practicable during construction. Opportunities to improve townscape, e.g. through decluttering of signage to be considered during design.	0	-	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Water	Protect and enhance the water environment	The closest DWSZ for surface water is within the scheme. The WFD River 'Ketley Brook source to Ketley Flood Meadow' is located 130m west of the option. There are no WFD Canals or Lakes, SPZs, Groundwater DWSZ or Bathing Water sites within 2km of the scheme. Construction has the potential to have adverse effects on the intersected DWSZ and the WFD River in close proximity. If the improvement increases the number of vehicles using the road there may be an increased risk for pollution to the water environment during operation through run off or tyre wear and it is likely that WFD assessment would be required to fully understand risks through construction and operational activities.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.	0	-	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty

Soil	Protect soil resources and avoid land contamination	The scheme is located within both Grade 2 and Grade 3 Agricultural Land. Sommerfield Road, Trench Historic Landfill Site is located approximately 1.5km south of the scheme. No significant effects are anticipated during construction or operation due to the improvements likely to be largely located on existing infrastructure. There may be the potential to disturb or remediate contaminated land due to the proximity to a historic landfill site, although due to the works being improvements to existing infrastructure any effects are anticipated to be minor.	Consideration of soil quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring. Use of SuDS and / or conventional pollution control techniques such as petrol interceptors to prevent soil pollution.	0	-	0	0	Characterisation of effects Magnitude Scale Duration Permanence Certainty
				✓	✓	✓	✓	
				Local	Local	Local	Local	
				ST	ST	LT	LT	
				Temp	Temp	Perm	Perm	
				Med	Med	Med	Med	
Natural Resources	Promote sustainable use of resources and natural assets	The nearest permitted waste site (New Acres Landfill Site) is approximately 1.4km south. Construction will require resources for the improvements. No effects during operation are anticipated.	Consideration of waste hierarchy and use of recycled or re-used materials in a Site Waste Management Plan (SWMP).	0	-	0	0	Characterisation of effects Magnitude Scale Duration Permanence Certainty
				✓	✓	✓	✓	
				Local	Local	Local	Local	
				ST	ST	LT	LT	
				Temp	Temp	Perm	Perm	
				Med	Med	Med	Med	
Economic	Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all	Construction activities will provide/maintain employment opportunities. The scheme may also improve accessibility and connectivity to jobs and skills by reducing delays and enhancing overall network performance by reducing congestion.	Provide employment opportunities to unskilled / apprentices at construction stage.	+	0	++	0	Characterisation of effects Magnitude Scale Duration Permanence Certainty
				✓	✓	✓	✓	
				Local	Local	Local	Local	
				ST	ST	LT	LT	
				Temp	Temp	Perm	Perm	
				Med	Med	Med	Med	
	Support the wider coordination of land use and energy planning across Telford and Wrekin	The scheme is within proximity to the Telford built up area. The scheme aims to improve the network efficiency for current and future demand and may therefore be beneficial in relation to coordination of land use, energy planning and transport planning.	None identified.	0	0	+	0	Characterisation of effects Magnitude Scale Duration Permanence Certainty
				✓	✓	✓	✓	
				Local	Local	Local	Local	
				ST	ST	LT	LT	
Social	Improve health and well-being for all citizens and reduce inequalities in health <i>(HIA specific objective)</i>	There may be an increase in air quality emissions during construction which would particularly impact children, elderly and other vulnerable groups including those with respiratory conditions. It is noted that Hadley Learning Centre and Shrewsbury and Telford Hospital are located adjacent to the scheme. Wider and vulnerable groups would be benefitted during operation of this intervention due to reduced traffic congestion, however if the improvements result in	Consideration of air quality in Construction Environmental Management Plans (CEMPs).	0	-	+	-	Characterisation of effects Magnitude Scale Duration Permanence Certainty
				✓	✓	✓	✓	
				Local	Local	Local	Local	
				ST	ST	LT	LT	
				Temp	Temp	Perm	Perm	
				Med	Med	Med	Med	

		increased traffic in the area there may be negative effects.						
	Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (<i>EqIA specific objective</i>)	There may be an increase in air quality emissions during construction which may particularly impact children, elderly and other vulnerable groups including those with respiratory conditions. The improvements may promote greater equality of opportunity as they would allow for increased connectivity and better journey times. The scheme will primarily benefit those in ownership of cars and have limited benefits for those in lower income groups who do not own cars.	Consideration of air quality in Construction Environmental Management Plans (CEMPs).	0	-	++	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Rural	Promote fairness and equity in rural connectivity (<i>Rural proofing specific objective</i>)	The scheme is not anticipated to improve rural connectivity.	None identified.	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty

A5 Watling Street Corridor Improvements

Scheme Name		A5 Watling Street Corridor Improvements						
Scheme Description		An integrated package of infrastructure maintenance and improvement works, covering corridor-wide drainage, traffic management, footways, and carriageway improvements.						
ISA Topic	ISA Objective	Comment	Mitigation	Residual Construction		Residual Operational		
				Positive Effects	Negative Effects	Positive Effects	Negative Effects	
Air Quality & Noise Pollution	Protect and improve air quality	There are no AQMAs within 10km of the scheme. It is anticipated that there will be negative effects on air quality during the construction phase. During operation it is anticipated there will be reduced traffic congestion and therefore reduced air emissions, however if the improvements result in increased traffic in the area there may be negative effects.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on air quality e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	--	+	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Reduce the impact on environmental noise from transportation sources	The nearest Noise Action Important Area is located 0.6km south. It is anticipated that there will be negative effects on noise during the construction phase. During operation it is anticipated there will be reduced traffic congestion and therefore reduced air emissions,	Consideration of noise in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on noise e.g., timing of works or ensuring all plant and	0	--	+	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale

		however if the improvements result in increased traffic in the area there may be negative effects.	machinery are switched off when not in use.	ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Climate	Reduce carbon emissions from transport and contribute to meeting Telford and Wrekin's goal of carbon neutral by 2030	Construction activities will result in CO2 emissions. During operation the use of vehicles will continue and therefore there will not be a significant reduction in CO2 emissions, although a reduction in congestion may result in a slight reduction in emissions. Additionally, if the improvements result in increased traffic in the area there may be negative effects in terms of emissions.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise emissions e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	--	+	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding	The scheme does not fall within Flood Zones 2 or 3. There may be an increase in impermeable surface where improvements involve road widening or adding new lanes for example, which would increase the risk of flooding but it is anticipated that most of works will be within the existing road network and therefore negative effects would not be significant.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMP's). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.	0	-	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Biodiversity	Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	The closest LNR (Limekiln Wood) is approximately 1.2km south west. The Wrekin and The Ercall SSSI is located 1.1km south west. The closest parcel of Ancient Woodland is located 1.1km west of the option. There is a parcel of Deciduous Woodland Priority Habitat located 0.2km south of the option. There are no NNRs, RSPB Reserves, Biosphere Reserves or MCZs within 3km of the scheme. The HRA concludes that the scheme is unlikely to result in significant effects on any European site Construction could lead to indirect effects on the Deciduous Woodland or SSSI such as noise and light pollution. During operation, the project is not anticipated to have significant effects on any designated sites, however indirect effects may be possible. It is to be noted that a reduction in congestion could reduce pressures on habitat and species, while if improvements lead to increased traffic volumes there may be negative effects.	Consideration of the timing of construction works in relation to ecological windows and legislative requirements. Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs). Appropriate management of invasive species where applicable. Control of invasive species where necessary.	0	--	+	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Protect and enhance sites designated for their international importance for nature conservation purposes (linked to HRA)	There are no SPAs, SACs or Ramsar sites within 10km of the scheme and none are identified as being hydrologically connected. The scheme is therefore not anticipated to impact on internationally designated sites during construction or operation.	Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs).	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration

				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Geodiversity	Protect, enhance and promote geodiversity	The Wrekin and The Ercall SSSI located 1.1km south west has been designated principally for geological reasons. The scheme has the potential to affect geodiversity during construction, however if improvements are confined to the existing interchange effects are expected to be limited.	Consideration of geodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs).	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Historic Environment	Protect and enhance cultural heritage assets and their settings, and the wider historic environment	The nearest listed building is 'Cock Hotel' (Grade II) located 40m west. Wellington Conservation Area is located 0.5km north west. The Scheduled Monument 'Coal mining remains 350m north west and 520m of New Works Village' is located 1.7km south of the scheme. No World Heritage Sites, Protected Wreck Sites or Battlefields are located within 2km. There is unlikely to be significant adverse effects on designated heritage during construction or operation There is the potential for indirect effects on setting and from noise and vibration on the listed buildings in close proximity during construction. Discovery of unexpected heritage assets is unlikely if the improvements are focused within the existing road network.	Any activities within close proximity which could cause damage or disturbance to these assets, including parking vehicles should be avoided and be managed via a CEMP. Precautions for unexpected heritage discovery during construction. Potential need for archaeological watching brief during construction, particularly in areas not previously developed. Consideration of unexpected heritage discovery in Construction Environmental Management Plans (CEMPs).	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Landscape and Visual	Conserve and enhance the natural beauty of Telford and Wrekin's protected landscapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity	The option falls within Shropshire, Cheshire and Staffordshire Plain National Character Area. Shropshire Hills National Landscape is located 1.1km south west of the scheme. There are no National Trails or National Parks within 4km of the scheme. The scheme involves improvements to existing infrastructure and is unlikely to have significant effects on National Character Areas or National Landscapes.	Use of best practice construction techniques and Construction Environmental Management Plan (CEMP) to ensure that the character and quality of landscapes and townscapes are maintained as far as practicable during construction. Opportunities to improve townscape, e.g. through decluttering of signage to be considered during design.	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Water	Protect and enhance the water environment	The closest DWSZ for surface water is within the scheme. The WFD River 'Ketley Brook source to Ketley Flood Meadow' is located 0.6km east of the option. The scheme lies within a Zone 3 SPZ. There are no WFD Canals or Lakes, Groundwater DWSZ or Bathing Water sites within 2km of the scheme. Construction has the potential to have adverse effects on the intersected SPZ and DWSZ. If the improvement increases the number of vehicles using the road there may be an increased risk for pollution to the water environment during operation through run off or tyre wear and it is likely that WFD assessment would be required to	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.	0	-	0	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Temp	Temp	Perm	Perm	Permanence

		fully understand risks through construction and operational activities.		Med	Med	Med	Med	Certainty
Soil	Protect soil resources and avoid land contamination	The scheme is within Urban land. Bucks head Historic Landfill Site is located approximately 130m north of the scheme. No significant effects are anticipated during construction or operation due to the improvements likely to be largely located on existing infrastructure. There may be the potential to disturb or remediate contaminated land due to the proximity to a historic landfill site, although due to the works being improvements to existing infrastructure any effects are anticipated to be minor.	Consideration of soil quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring. Use of SuDS and / or conventional pollution control techniques such as petrol interceptors to prevent soil pollution.	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Natural Resources	Promote sustainable use of resources and natural assets	The nearest permitted waste site (Sinclair Works) is approximately 0.7km east. Construction will require resources for the improvements. No effects during operation are anticipated.	Consideration of waste hierarchy and use of recycled or re-used materials in a Site Waste Management Plan (SWMP).	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Economic	Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all	Construction activities will provide/maintain employment opportunities. The scheme may also improve accessibility and connectivity to jobs and skills by reducing delays and enhancing overall network performance by reducing congestion.	Provide employment opportunities to unskilled / apprentices at construction stage.	+	0	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Support the wider coordination of land use and energy planning across Telford and Wrekin	The scheme is within Telford built up area. The scheme aims to improve the network efficiency for current and future demand and may therefore be beneficial in relation to coordination of land use, energy planning and transport planning.	None identified.	0	0	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Social	Improve health and well-being for all citizens and reduce inequalities in health <i>(HIA specific objective)</i>	There may be an increase in air quality emissions during construction which would particularly impact children, elderly and other vulnerable groups including those with respiratory conditions. It is noted that Telford College is located approximately 100m east of the scheme and Shorewood Primary School is 400m west of the scheme.	Consideration of air quality in Construction Environmental Management Plans (CEMPs).	0	-	++	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration

		Wider and vulnerable groups would be benefitted during operation of this intervention due to reduced traffic congestion, however if the improvements result in increased traffic in the area there may be negative effects.		Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (<i>EqIA specific objective</i>)	There may be an increase in air quality emissions during construction which may particularly impact children, elderly and other vulnerable groups including those with respiratory conditions. The improvements may promote greater equality of opportunity as they would allow for increased connectivity and better journey times. The scheme will primarily benefit those in ownership of cars and have limited benefits for those in lower income groups who do not own cars.	Consideration of air quality in Construction Environmental Management Plans (CEMPs).	0	-	++	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
Med	Med	Med	Med	Certainty				
Rural	Promote fairness and equity in rural connectivity (<i>Rural proofing specific objective</i>)	The scheme is not anticipated to improve rural connectivity.	None identified.	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty

LCWIP schemes

Scheme Name		LCWIP schemes (Old Park Roundabout)						
Scheme Description		Delivery of identified LCWIP schemes to provide high-quality walking and cycling improvements that support modal shift, strengthen network connectivity, and enhance user safety.						
ISA Topic	ISA Objective	Comment	Mitigation	Residual Construction		Residual Operational		
				Positive Effects	Negative Effects	Positive Effects	Negative Effects	
Air Quality & Noise Pollution	Protect and improve air quality	There are no AQMAs within 10km of the scheme. It is anticipated that there may be negative effects on air quality during the construction phase. During operation it is anticipated there will be a reduction in traffic and an improvement in air quality due to a modal shift towards sustainable travel methods.	Consideration of air quality in Construction Environmental Management Plans (CEMP's). Construction techniques to minimise the impact on air quality e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	-	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Reduce the impact on environmental noise	The nearest Noise Action Important Area is 0.8km north east.	Consideration of noise in Construction Environmental Management Plans (CEMP's).	0	-	++	0	
				Characterisation of effects				

	from transportation sources	It is anticipated that there will be negative effects on noise during the construction phase. During operation it is anticipated there will be a reduction in traffic and a reduction in environmental noise due to a modal shift towards sustainable travel methods.	Construction techniques to minimise the impact on noise e.g., timing of works or ensuring all plant and machinery are switched off when not in use.	✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Climate	Reduce carbon emissions from transport and contribute to meeting Telford and Wrekin’s goal of carbon neutral by 2030	Construction activities will result in CO2 emissions. During operation it is anticipated there will be a shift towards active travel from private vehicles resulting in a reduction of C02 emissions, although the nature of these modes means that the actual quantification of effect might be marginal.	Consideration of air quality in Construction Environmental Management Plans (CEMP’s). Construction techniques to minimise emissions e.g., ensuring all plant and machinery are well maintained and not emitting excessive fumes.	0	-	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding	The scheme does not fall within Flood Zones 2 or 3. There may be an increase in impermeable surface where improvements involve cycle lane widening or adding new cycle lanes for example, which would increase the risk of flooding, but it is anticipated that most of works will be within the existing cycle network and therefore negative effects would not be significant.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMP’s). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Biodiversity	Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	The closest LNR (Telford Town Park) is approximately 0.8km south east. The closest parcel of Ancient Woodland is located 1.5km south east. There is a parcel of Deciduous Woodland Priority Habitat which intersects the option. There are no SSSIs, NNRs, RSPB Reserves, Biosphere Reserves or MCZs within 3km of the scheme. During construction, loss of the adjacent priority habitat is possible. There may also be indirect effects such as noise and light pollution during construction. During operation, the project is not anticipated to have significant effects on any designated sites, however indirect effects may be possible. It is to be noted that a reduction in congestion could reduce pressures on habitat and species.	Consideration of the timing of construction works in relation to ecological windows and legislative requirements. Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs). Appropriate management of invasive species where applicable. Control of invasive species where necessary.	0	-	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Protect and enhance sites designated for their international importance for nature conservation purposes (linked to HRA)	There are no SPAs, SACs or Ramsar sites within 10km of the scheme and none are identified as being hydrologically connected. The HRA concludes that the scheme is unlikely to result in significant effects on any European site The scheme is therefore not anticipated to impact on internationally designated sites during construction or operation.	Consideration of biodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs).	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Temp	Temp	Perm	Perm	Permanence

				Med	Med	Med	Med	Certainty
Geodiversity	Protect, enhance and promote geodiversity	No geologically significant features have been identified in proximity to the scheme. The scheme has the potential to affect geodiversity during construction, however if improvements are confined to the cycle lanes and walkways effects are expected to be limited.	Consideration of geodiversity and designated sites and habitats in Construction Environmental Management Plans (CEMPs).	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Historic Environment	Protect and enhance cultural heritage assets and their settings, and the wider historic environment	The nearest listed building is ‘Church of St Leonard’ (Grade II*) located 0.7km south. Horsehay and Spring Village Conservation Area is located south west. No World Heritage Sites, Scheduled Monuments, Protected Wreck Sites, Battlefields or Parks and Gardens are located within 2km. There is unlikely to be significant adverse effects on designated heritage during construction or operation due to the distance between the option and the nearest heritage assets.	Any activities within close proximity which could cause damage or disturbance to these assets, including parking vehicles should be avoided and be managed via a CEMP. Precautions for unexpected heritage discovery during construction. Potential need for archaeological watching brief during construction, particularly in areas not previously developed. Consideration of unexpected heritage discovery in Construction Environmental Management Plans (CEMPs).	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Landscape and Visual	Conserve and enhance the natural beauty of Telford and Wrekin’s protected landscapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity	The option falls within Mid Severn Sandstone Plateau National Character Area. There are no National Landscapes, National Trails or National Parks within 4km of the scheme. No significant effects are anticipated during construction or operation as improvements will largely be limited to the existing interchange.	Use of best practice construction techniques and Construction Environmental Management Plan (CEMP) to ensure that the character and quality of landscapes and townscapes are maintained as far as practicable during construction. Opportunities to improve townscape, e.g. through decluttering of signage to be considered during design.	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Water	Protect and enhance the water environment	The closest WFD River is located 1.5km west. The closest DWSZ for surface water intersects the option. There are no WFD Lakes, SPZs, Groundwater DWSZ or Bathing Water sites within 2km of the scheme. Construction is unlikely to have any significant adverse effects on water although there is potential for pollution incidents.	Consideration of water quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring.	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Soil				0	0	0	0	
				Characterisation of effects				

	Protect soil resources and avoid land contamination	The scheme is within Non-Agricultural Land. Lilleshall/Lilleshall Works, Snedshill Historic Landfill Site is located approximately 0.7km north east of the scheme. No significant effects are anticipated during construction or operation due to the improvements likely to be largely located on the existing walkways and cycle lanes.	Consideration of soil quality and pollution in Construction Environmental Management Plans (CEMPs). Use of best practice construction techniques to minimise the likelihood of a pollution incident occurring. Use of SuDS and / or conventional pollution control techniques such as petrol interceptors to prevent soil pollution.	✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Natural Resources	Promote sustainable use of resources and natural assets	The are no permitted waste sites located within 2km of the option. Construction will require resources for the improvements.	Consideration of waste hierarchy and use of recycled or re-used materials in a Site Waste Management Plan (SWMP).	0	-	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Economic	Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all	Construction activities will provide/maintain employment opportunities. The scheme may also improve accessibility and connectivity to jobs and skills by reducing delays and enhancing overall network performance. However, the scheme is not anticipated to be beneficial to those with mobility issues.	Provide employment opportunities to unskilled / apprentices at construction stage.	+	0	+	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Support the wider coordination of land use and energy planning across Telford and Wrekin	The scheme is within Telford built up area. The scheme aims to improve the current walkway and cycle network efficiency and may therefore be beneficial in relation to coordination of land use, energy planning and transport planning.	None identified.	0	0	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Social	Improve health and well-being for all citizens and reduce inequalities in health (<i>HIA specific objective</i>)	There may be a slight increase in air quality emissions during construction which would particularly impact children, elderly and other vulnerable groups including those with respiratory conditions. Significant effects cannot be ruled out until the nature of the improvements are known. Wider and vulnerable groups in the surrounding area will benefit during operation of this option as there will be a shift towards active and sustainable modes of transport. Improvements to cycle routes and walkways will make	Consideration of air quality in Construction Environmental Management Plans (CEMPs).	0	-	++	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration

		these modes of transport more accessible and safer for wider and vulnerable groups. However, some groups including disabled, elderly and pregnant women may not be able to benefit from the intervention.		Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
	Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer society (<i>EqIA specific objective</i>)	There may be a slight increase in air quality emissions during construction which would particularly impact children, elderly and other vulnerable groups including those with respiratory conditions. The new cycle route may promote greater equality of opportunity as it would allow for those in lower income groups who do not own cars more reliable transport. Access may ne increased to employment opportunities and public services / recreational facilities. The improvement of the cycle lane and walkway will make this mode of transport more accessible and safer for wider and vulnerable groups. However, some groups including disabled, elderly and pregnant women may not be able to benefit from the intervention.	None identified.	0	-	++	-	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Rural	Promote fairness and equity in rural connectivity (<i>Rural proofing specific objective</i>)	The scheme is not anticipated to improve rural connectivity.	None identified.	0	0	0	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty

Ironbridge Park & Ride

Scheme Name		Ironbridge Park & Ride						
Scheme Description		Continuing Ironbridge Park & Ride supported bus service						
ISA Topic	ISA Objective	Comment	Mitigation	Residual Construction		Residual Operational		
				Positive Effects	Negative Effects	Positive Effects	Negative Effects	
Air Quality & Noise Pollution	Protect and improve air quality	There are no AQMAs within 10km of the scheme. No construction effects are anticipated for this option. During operation there may be minor benefits in terms of air quality if the bus services encourage people to use more sustainable modes of transport.	None identified.	N/A	N/A	+	0	
				Characterisation of effects				
				N/A	N/A	✓	✓	Magnitude
				N/A	N/A	Local	Local	Scale
				N/A	N/A	LT	LT	Duration
				N/A	N/A	Perm	Perm	Permanence
				N/A	N/A	Med	Med	Certainty
	Reduce the impact on environmental noise	There are no Noise Action Important Area in proximity to the park and ride. No construction effects are anticipated for this option	None identified.	N/A	N/A	+	0	
				Characterisation of effects				

	from transportation sources	During operation there may be minor benefits in terms of environmental noise from transportation if the bus services encourage people to use more sustainable modes of transport.		N/A	N/A	✓	✓	Magnitude
				N/A	N/A	Local	Local	Scale
				N/A	N/A	LT	LT	Duration
				N/A	N/A	Perm	Perm	Permanence
				N/A	N/A	Med	Med	Certainty
Climate	Reduce carbon emissions from transport and contribute to meeting Telford and Wrekin’s goal of carbon neutral by 2030	Construction activities will result in CO2 emissions. No construction effects are anticipated for this option During operation there may be minor benefits in terms of reducing carbon emissions if the bus services encourage people to use more sustainable modes of transport.	None identified.	N/A	N/A	+	0	
				Characterisation of effects				
				N/A	N/A	✓	✓	Magnitude
				N/A	N/A	Local	Local	Scale
				N/A	N/A	LT	LT	Duration
				N/A	N/A	Perm	Perm	Permanence
				N/A	N/A	Med	Med	Certainty
	Maximise adaptation and resilience of the transport network to the effects of a changing climate, including through reducing the risk of flooding	The scheme does not fall within Flood Zones 2 or 3. No construction or operational effects are anticipated for this option in relation to maximising the adaption and resilience of the transport network to climate change.	None identified.	N/A	N/A	N/A	N/A	
				Characterisation of effects				
				N/A	N/A	N/A	N/A	Magnitude
				N/A	N/A	N/A	N/A	Scale
				N/A	N/A	N/A	N/A	Duration
				N/A	N/A	N/A	N/A	Permanence
				N/A	N/A	N/A	N/A	Certainty
Biodiversity	Enhance biodiversity, promote ecosystem resilience and functionality and contribute to the achievement of Biodiversity Net Gain and the delivery of the Nature Recovery Network	The closest SSSI (Lydebrook Dingle) is located approximately 250m west and the closest LNR is located approximately 750m south east. Lincoln Hill SSSI is also located 1.8km south of the scheme. There are 16 parcels of priority habitat located within 500m of the scheme, with the closest being a parcel of deciduous woodland located 25m south. There are 18 parcels of ancient woodland located within 2km of the scheme with the closest parcel located 25m south. No construction effects are anticipated for this option. During operation, the scheme is not anticipated to have significant effects on any designated sites, however indirect effects may be possible through runoff. It is to be noted that a reduction in congestion through an uptake in sustainable modes of transport could reduce pressures on habitat and species.	None identified.	N/A	N/A	+	-	
				Characterisation of effects				
				N/A	N/A	✓	✓	Magnitude
				N/A	N/A	Local	Local	Scale
				N/A	N/A	LT	LT	Duration
				N/A	N/A	Perm	Perm	Permanence
				N/A	N/A	Med	Med	Certainty
	Protect and enhance sites designated for their international importance for nature conservation purposes (linked to HRA)	There are no SPAs, SACs or Ramsar sites within 10km of the scheme and none are identified as being hydrologically connected. The HRA concludes that the scheme is unlikely to result in significant effects on any European site No construction effects are anticipated for this option.	None identified.	N/A	N/A	0	0	
				Characterisation of effects				
				N/A	N/A	✓	✓	Magnitude
				N/A	N/A	Local	Local	Scale
				N/A	N/A	LT	LT	Duration

		The scheme is therefore not anticipated to impact on internationally designated sites during operation.		N/A	N/A	Perm	Perm	Permanence
				N/A	N/A	Med	Med	Certainty
Geodiversity	Protect, enhance and promote geodiversity	Lincoln Hill SSSI which is located 1.8km south of the option has been designated principally for it's geological interest. No construction effects are anticipated for this option. No operational effects are anticipated in relation to geodiversity due to the schemes distance from the Geological SSSI.	None identified.	N/A	N/A	0	0	
				Characterisation of effects				
				N/A	N/A	✓	✓	Magnitude
				N/A	N/A	Local	Local	Scale
				N/A	N/A	LT	LT	Duration
				N/A	N/A	Perm	Perm	Permanence
				N/A	N/A	Med	Med	Certainty
Historic Environment	Protect and enhance cultural heritage assets and their settings, and the wider historic environment	The nearest listed building is 'The Old Wind' (Grade II) located 0.9km south. Severn Gorge Conservation Area is located 0.3km south and Ironbridge Gorge World Heritage Site is located 0.6km south. The nearest Scheduled Monument to the option is Darby Ironworks, Coalbrookdale, located 0.9km south. No construction effects are anticipated for this option. During operation, the option is not expected to have any significant effects on the historic environment.	None identified.	N/A	N/A	0	0	
				Characterisation of effects				
				N/A	N/A	✓	✓	Magnitude
				N/A	N/A	Local	Local	Scale
				N/A	N/A	LT	LT	Duration
				N/A	N/A	Perm	Perm	Permanence
				N/A	N/A	Med	Med	Certainty
Landscape and Visual	Conserve and enhance the natural beauty of Telford and Wrekin's protected landscapes and townscapes, protect wider landscapes, seascapes and townscapes and enhance visual amenity	The option falls within Mid Severn Sandstone Plateau National Character Area. Shropshire Hills National Landscape is located 2.5km south west of the option. There are no National Trails or National Parks within 4km of the scheme. No construction effects are anticipated for this option. No significant effects are anticipated during operation in relation to conserving landscapes and townscapes, however there may be slight benefits for visual amenity through less congestion as a result of increased use of public transport.	None identified.	N/A	N/A	+	0	
				Characterisation of effects				
				N/A	N/A	✓	✓	Magnitude
				N/A	N/A	Local	Local	Scale
				N/A	N/A	LT	LT	Duration
				N/A	N/A	Perm	Perm	Permanence
				N/A	N/A	Med	Med	Certainty
Water	Protect and enhance the water environment	The closest DWSZ for surface water is approximately 0.7km south west. The closest WFD River is located 0.3km south west and the closest WFD Lake is located 1.5km north. There are no SPZs, Groundwater DWSZ or Bathing Water sites within 2km of the scheme. No construction effects are anticipated for this option. There may be a reduced risk of pollution during operation due to a shift away from conventional transport towards more sustainable modes of transport.	None identified.	N/A	N/A	+	0	
				Characterisation of effects				
				N/A	N/A	✓	✓	Magnitude
				N/A	N/A	Local	Local	Scale
				N/A	N/A	LT	LT	Duration
				N/A	N/A	Perm	Perm	Permanence
				N/A	N/A	Med	Med	Certainty
Soil	Protect soil resources and avoid land contamination	The scheme is within Non-Agricultural Land. The scheme lies within Stoneyhill Field Historic Landfill Site. No construction effects are anticipated for this option. No significant effects are anticipated during operation.	None identified.	N/A	N/A	0	0	
				Characterisation of effects				
				N/A	N/A	✓	✓	Magnitude
				N/A	N/A	Local	Local	Scale

				N/A	N/A	LT	LT	Duration
				N/A	N/A	Perm	Perm	Permanence
				N/A	N/A	Med	Med	Certainty
Natural Resources	Promote sustainable use of resources and natural assets	The nearest permitted waste site (Coalmoor Landfill Site) is approximately 0.3km north west. No construction effects are anticipated for this option. No significant effects are anticipated during operation.	None identified.	N/A	N/A	0	0	
				Characterisation of effects				
				N/A	N/A	✓	✓	Magnitude
				N/A	N/A	Local	Local	Scale
				N/A	N/A	LT	LT	Duration
				N/A	N/A	Perm	Perm	Permanence
				N/A	N/A	Med	Med	Certainty
Economic	Promote economic growth and job creation, and improve access and connectivity to jobs and skills for all	No construction effects are anticipated for this option. The scheme may improve accessibility and connectivity to jobs and skills by reducing delays and enhancing overall network performance. Additionally, the scheme may also result in job creation.	None identified.	N/A	N/A	++	0	
				Characterisation of effects				
				N/A	N/A	✓	✓	Magnitude
				N/A	N/A	Local	Local	Scale
				N/A	N/A	LT	LT	Duration
				N/A	N/A	Perm	Perm	Permanence
				N/A	N/A	Med	Med	Certainty
	Support the wider coordination of land use and energy planning across Telford and Wrekin	The scheme is within close proximity to the Telford built up area. The scheme aims to improve the network efficiency for current and future demand and may therefore be beneficial in relation to coordination of land use, energy planning and transport planning.	None identified.	0	0	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty
Social	Improve health and well-being for all citizens and reduce inequalities in health (HIA specific objective)	No construction effects are anticipated for this option. Wider and vulnerable groups would be benefitted during operation of this intervention due to reduced congestion. Where the scheme reduces delays it will improve accessibility and connectivity to services and facilities. Continuing the Ironbridge Park & Ride service would support access to healthcare and other services, particularly for those without access to a private vehicle. The scheme encourages the use of public transport.	None identified.	N/A	N/A	+	0	
				Characterisation of effects				
				N/A	N/A	✓	✓	Magnitude
				N/A	N/A	Local	Local	Scale
				N/A	N/A	LT	LT	Duration
				N/A	N/A	Perm	Perm	Permanence
				N/A	N/A	Med	Med	Certainty
	Promote greater equality of opportunity for all citizens, with the desired outcome of achieving a fairer	No construction effects are anticipated for this option. The scheme may promote greater equality of opportunity as it would allow for increased access to public transport, employment opportunities and public services / recreational facilities.	None identified.	N/A	N/A	+	0	
				Characterisation of effects				
				N/A	N/A	✓	✓	Magnitude
				N/A	N/A	Local	Local	Scale

	society (EqIA specific objective)			N/A	N/A	LT	LT	Duration
				N/A	N/A	Perm	Perm	Permanence
				N/A	N/A	Med	Med	Certainty
Rural	Promote fairness and equity in rural connectivity (Rural proofing specific objective)	The Park & Ride service is expected to support connections between surrounding rural areas, Ironbridge Gorge, and nearby towns. By maintaining a reliable public transport option, the scheme helps reduce transport isolation and improves access to services, employment, and opportunities for rural communities.	None identified.	0	0	+	0	
				Characterisation of effects				
				✓	✓	✓	✓	Magnitude
				Local	Local	Local	Local	Scale
				ST	ST	LT	LT	Duration
				Temp	Temp	Perm	Perm	Permanence
				Med	Med	Med	Med	Certainty

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