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CÒMHDHAIL ALBA

Environmental Impact Assessment Record of Determination

M74 to M77 Westbound

Contents

Project Details

Description

The works are required to maintain the safety and integrity of a stretch of carriageway where surface defects (fretting/chip loss) and structural defects (rutting/longitudinal/transverse/cracking) have been identified from the M74 to the M77. The works will include the repair of both surface and structural defects to improve the quality and safety and to minimise risk of flooding during adverse weather to the carriageway for road users.

Construction will involve installing concrete inlays from depths between approx. 30mm-300mm along a section of the M74 to the M77 Westbound (WB).

The scheme covers an area of approximately 1.96ha**.**

Construction activities include:

- Implementation of Traffic Management (TM);
- Milling out of existing material by road planer;
- Loader used to collect and move excess material within work area;
- Sweeper to collect loose material;
- Waste material will be removed from site;
- New materials will be laid including: binder, bituminous asphalt and tack bond, and compressed using a road paver and compacted by a roller;
- Road markings and road studs will be applied where necessary; and
- TM removal.

Machinery and plant required will include a roller wagon and paver planer.

The works are currently programmed to be completed in August 2024 over a period of ten nights and the traffic management will consist of full on-slip closure, and lane closures for mainline and off slip sections.

Location

The Scheme is located along the M74 to M77 WB, in Glasgow City Centre and can be found at the following Grid Reference (NGRs) (Figure 1):

- Start: NS 57393 64165
- End: NS 56180 63876

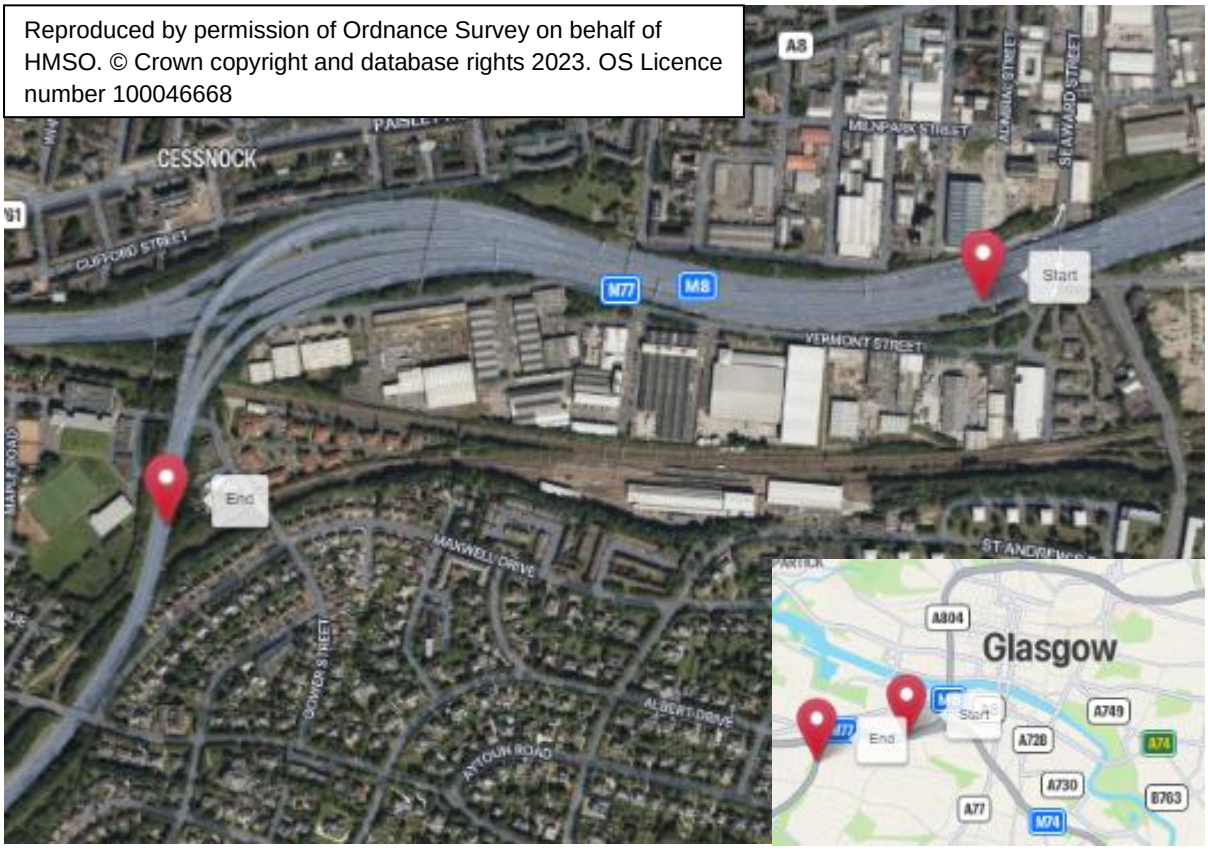

Figure 1: Location and Scheme extents.

Description of Local Environment

Air Quality

The scheme is located on the M74 to M77 WB traveling through Glasgow in a predominately built-up area with over 100 residential properties and several industrial buildings located within 200m of the scheme. This area lies within Glasgow City Council. The closest residential property is approximately 100m south towards the end point of the scheme. There are several other receptors to note within 200m:

- Glasgow School of Sport located approximately 40m west from the works.
- Academy of Electronic Music located approximately 65m east from the works.
- Plantation Park located approximately 85m south of the works.
- Bellahouston Academy located approximately 100m west from the works.
- Hyde N Seek Nurseries Ltd located approximately 146m north of the works.

This scheme is not located within any Air Quality Management Areas (AQMA).

Baseline air quality is mainly influenced by vehicles travelling along the M74 and the M77 motorways.

The closest manual count point at 82037 shows that the Annual Average Daily Flow of Traffic (AADF) in 2023 for all motor vehicles along the M77 is 85941 with 3288 of those being heavy good vehicles (HGVs).

Scottish Pollutant Release Inventory (SPRI) has record of the following pollutant releases to air within 1km of the scheme:

- Production and processing of metals: Scottish Galvanizers Ltd located approximately 80m south of the carriageway.
- Waste and Water Management: WEEE Scotland Ltd Recycling Centre, located approximately 560m north of the carriageway.

Cultural Heritage

A desktop study using PastMap has been undertaken to identify any cultural heritage designations within 300m of the scheme extents.

The designated features are as follows:

- 118 And 126-136 (Even Nos) Stanley Street, Former Our Lady and St Margaret's Presbytery and Primary School Including Gatepiers, Gates, Railings and

Boundary Wall Listed Building (Ref: LB46279) located approximately 110m north of the scheme. This is listed as a Category C Listed Building.

- West Pollokshields Conservation Area located approximately 140m east from the scheme.
- Dumbreck Conservation Area located approximately 140m west from the scheme.
- 423 Paisley Road West, Iqra Academy, Former Bellahouston Academy Annexe Listed building (Ref: LB33577) located approximately 220m north of the scheme. This is listed as a Category B Listed Building.
- Walmer Crescent Conservation Area located 240m north of the scheme.
- 71 Milnpark Street, Former Kingston Engine Works Listed Building (Ref: LB33970) located approximately 240m north of the scheme. This is listed as a Category B Listed Building.
- 73 Milnpark Street, Kinning Park Colour Works Listed Building (Ref: LB33518) located approximately 240m north of the scheme. This is listed as a Category B Listed Building.
- 17 Milnpark Street with Elevation to Seaward Street, Kinning Park Pumping Station Listed Building (Ref: LB33537) located approximately 240m north of the scheme. This is listed as a Category B Listed Building.
- 1-18 (Inclusive Nos) Walmer Crescent And 1, 3, 5a, 5b Cessnock Street Listed Building (Ref: LB33876) located approximately 260m south from the scheme. This is listed as a Category A Listed Building.
- 240 Nithsdale Road, Sherbrooke St Gilbert's Church and Hall Listed building (Ref: LB33453) located approximately 270m south from the scheme. This is listed as a Category B Listed Building.
- 252, 254, 256 Paisley Road West And 2, 4, 6, Harvie Street Listed Building (Ref: LB33527) located approximately 290m north of the scheme. This is listed as a Category B Listed Building.
- 18 Carillon Road, 67 Clifford Street, Ibrox Parish Church Listed building (Ref: LB33575) located approximately 300m west from the scheme. This is listed as a Category B Listed Building.

There are approximately 150 non-designated features located within 200m of the scheme. The non-designated features located within the scheme extents are as follows:

- Bellahouston Academy, Glasgow / Standingstone, Standingstane Historic Environment Record (HER) (Ref: 46144).
- Desk-Based Assessment and Field Survey: Glasgow Airport Rail Link Environmental Statement / Archaeology and Cultural Heritage HER (Ref: 3305).
- Glasgow, 241 Macellan Street, Jam and Confectionery Works HER (Ref: 48084) and Canmore (Ref: 179493).

- Glasgow, 9-13 Maclellan Street, Tenement and Shops HER (Ref: 77585) and Canmore (Ref: 206369).
- Glasgow, Mclellan Street, Trinity Mission Church HER (Ref: 77584).
- Glasgow, Stanley Street, Arbuckle, Smith and Co Bonded Warehouse (HER) (Ref: 86202),
- Glasgow, 184 Stanley Street, Confectionery Works / Hay Bros (HER) (Ref: 48117).
- Glasgow, 181 Stanley Street, Stables and Garage HER (Ref: 195735).

The scheme will be restricted to the carriageway boundary and views of and from the road will be temporarily impacted by the presence of TM, plant and vehicles during construction. This is predicted to be a slight temporary impact locally, with no permanent change to views or cultural heritage as a whole following the completion of works. As such, impact to cultural heritage has been assessed as being 'no change' and has been scoped out of requiring further assessment.

Landscape and Visual Effects

The scheme is located in an urban area of Glasgow. The surrounding landscape is primarily urban areas with sporadic woodland parcels.

According to Scotland Environment Web there are no Tree Preservation Orders (TPO) or ancient woodlands within 500m of the scheme. The scheme is also not situated with a National Park (NP) or National Scenic Area (NSA).

Pastmap highlights that the Pollok Park (Nether Pollok) Garden & Designed Landscape is located 1.1km from the scheme, however this is not visible from the scheme extents.

The Historic Landscape Assessment (HLA) Map notes that the scheme is within land classified as Motorway and Major roads with Urban areas and industrial/commercial areas surround the scheme.

The Scottish Landscape Character Type (LCT) Assessment Map notes the scheme is located in land that is classified as Urban which suggests that the scheme is located within a densely populated and built-up area.

The views from the road are primarily of the surrounding industrial buildings and small areas of trees which run along the carriageway. Views of, and from the road will be temporarily affected during construction due to the presence of works, traffic management and plant. No residential properties will have a view of the works due to vegetation screening.

As the works are minor and operating on a like-for-like basis and will be restricted to the existing carriageway boundary/bridge, no permanent changes to landscape features are predicted, therefore has been scoped out for further assessment.

Biodiversity

A desktop study using NatureScot's Sitelink resource has not identified the presence of any designated European sites within 2km of the scheme extents. This resource has not identified the presence of national designations (such as Sites of Special Scientific Interest (SSSIs) or Local Nature Reserves) within 1km of the scheme extents. No hydrological connectivity links the scheme extents to any European or nationally designated sites. The scheme does not meet any of the criteria regarding the requirement for a Habitats Regulation Appraisal (HRA).

The National Biodiversity Network (NBN) Atlas highlights the following Invasive Non-Native Species (INNS) within 500m of the scheme:

- Japanese Knotweed (*Fallopia japonica*)
- Himalayan Balsam (*Impatiens glandulifera*)
- Giant Hogweed (*Heracleum mantegazzianum*)

However, none of these were identified within the scheme extents.

A search of the Transport Scotland Asset Management Performance System (AMPS) online mapping tool records Rosebay willowherb (*Chamaenerion angustifolium*) and Common ragwort (*Jacobaea vulgaris*) along the verge of the carriageway of the scheme.

The scheme and the surrounding habitat have been reviewed by a senior ecologist utilising desktop resource. As a result, the need for a field survey was scoped out due to the nature of the works and that all works will be restricted to the existing carriageway boundary.

Geology and Soils

SiteLink notes there are no Geological Conservation Review Sites (GCRS) within 2km of the scheme extents. There are also no geological SSSI's located within 200m of the works.

The British Geology Viewer notes the geology of the soil within the scheme extents consists of the following:

Superficial deposits

- Raised Tidal Flat Deposits, Late Devensian - Gravel, sand and silt. Sedimentary superficial deposit formed between 116 and 11.8 thousand years ago during the Quaternary period.
- River Terrace Deposits - Gravel, sand and silt. Sedimentary superficial deposit formed between 2.588 million years ago and the present during the Quaternary period.

Bedrock geology

- Upper Limestone Formation - Sedimentary rock cycles, clackmannan group type. Sedimentary bedrock formed between 329 and 324 million years ago during the Carboniferous period.
- Passage Formation - Sedimentary rock cycles, clackmannan group type. Sedimentary bedrock formed between 328 and 318 million years ago during the Carboniferous period.
- Calmy Limestone - Limestone. Sedimentary bedrock formed between 328 and 324 million years ago during the Carboniferous period.

Scotland's Soils Map notes that there is no soil data within the scheme extents likely due to this location being urban setting. Therefore, no land capability score has been identified.

As the works will be restricted to the existing carriageway boundary and previously engineered layers, it has been determined that the project does not carry the potential to cause direct or indirect impact to geology or soils. As such, no significant impacts are anticipated, and geology and soils has been scoped out of requiring further assessment.

Material Assets and Waste

The proposed scheme does not require a Site Waste Management Plan (SWMP).

Table 1: Key Materials Required for Activities.

Activity	Material Required	Origin/ Content
Site Construction	• Road surfacing (aggregate and binder); • TS2010 surface course; • AC20 bituminous binder; • AC32 bituminous base; • Road paint and studs; • Lubricant;	TS2010 Surface Course allows a wider array of aggregate sources to be considered when compared to typical stone mastic asphalt (SMA). As a result, the use of TS2010 will reduce the usage of imported

Activity	Material Required	Origin/ Content
	• Vehicle fuel; • Oil;	aggregates and increase the use of a wider range of sustainable aggregate source. A proportion of RAP is used in asphalt production. Typical RAP values for base and binder are 10% - 15% with up to 10% in surface course.

Table 2: Key Waste Arising from Activities.

Activity	Waste Arising	Disposal/ Regulation
Site Construction	• Asphalt plannings (after coring no tar was present within the road cores)	Uncontaminated road planings generated as a result of the required works, will be fully recycled in accordance with the criteria stipulated within SEPA document 'Guidance on the Production of Fully Recoverable Asphalt Road Planings'. No coal tar is expected to be found due to previous investigation works and the age and make-up of the current scheme. The Contractor is responsible for the disposal of road planings and this has been registered in accordance with a Paragraph 13(a) waste exemption issued by SEPA, as described in Schedule 3 of the Waste Management Licensing Regulations 2011.

Noise and Vibration

The scheme is located on the M74 to M77 West Bound traveling through Glasgow in a predominately built-up area with over 200 residential properties and several industrial buildings located within 300m of the scheme. This area lies within Glasgow City Council. The closest residential property is approximately 100m south towards the end point of the scheme. There are several non-residential noise sensitive receptors within 300m:

- Glasgow School of Sport located approximately 40m west from the works.
- Academy of Electronic Music located approximately 65m east from the works.
- Plantation Park located approximately 85m south of the works.
- Bellahouston Academy located approximately 100m west from the works.
- Hyde N Seek Nurseries Ltd located approximately 146m north of the works.
- Sherbrooke Mosspark Parish Church located approximately 270m south from the works.
- Ibrox Parish Church (Church of Scotland) located approximately 300m west from the scheme.

Works are located within a Candidate Noise Management Area (CNMA) but not a Candidate Quiet Area (CQA). There are four CNMA's all located along the M74 to M77 within the scheme extents.

Baseline noise levels are influenced by vehicles travelling along the M77, M8 and M74 into Glasgow City. The road surface is in poor condition which will elevate the ambient noise levels.

Scotland Noise Map notes that the noise within the scheme extents ranges from >= 80 dB during daytime hours and 70 => x < 75 dB during night-time hours.

The closest manual count point is 82037 this shows that the Annual Average Daily Flow of Traffic (AADF) in 2023 for all motor vehicles along the M77 is 85941 with 3288 of those being heavy good vehicles (HGVs).

Population and Human Health

A study area of 300m has been used for this assessment as the works are minimal and like-for-like and are unlikely to impact any receptors beyond 300m.

There are over 200 residential properties and several industrial buildings located within 300m of the scheme. The closest residential property is approximately 100m

south towards the end point of the scheme. There are several other receptors to note within 300m:

- Glasgow School of Sport located approximately 40m west from the works.
- Academy of Electronic Music located approximately 65m east from the works.
- Plantation Park located approximately 85m south of the works.
- Bellahouston Academy located approximately 100m west from the works.
- Hyde N Seek Nurseries Ltd located approximately 146m north of the works.
- Dumbreck Train Station located approximately 240m southwest from the works.
- Sherbrooke Mosspark Parish Church located approximately 270m south from the works.
- Ibrox Parish Church (Church of Scotland) located approximately 300m west from the scheme.

Core Paths Scotland highlights three core paths located within 300m of the scheme. Core path C143A is a footpath located 10m south of the scheme that runs along Maclellan Street. Core path C143 is located to the 60m east of the scheme and is also National Cycle Network Route 7. Core path C143B is located 114m north of the works and runs through the Plantation Park. There are no Horse-riding routes located within 300m of the scheme.

The M74 and M77 does not have any bus stops within the carriageway however it is used for routes between Glasgow and the local wider area.

There is streetlighting along the either side of the carriageway within the full scheme extents.

Road Drainage and the Water Environment

There are no watercourses, ponds, reservoirs, burns or coastal water within 500m of the scheme. The closest watercourse according to Scottish Environment Protection Agency (SEPA)'s water Classification Hub, is the Clyde Estuary - Inner (inc Cart) (ID: 200510) located approximately 740m north of the scheme. This waterbody has an overall 'moderate' ecological potential under the Water Framework Directive (WFD). The ground water within the scheme extents is Govan Sand and Gravel groundwater (ID: 150779) which has been classified as having a 'moderate' ecological potential. This is not listed as drinking water protected area. The scheme is not located within a Nitrate Vulnerable Zone.

SEPA's Flood Maps shows that there is a 'high risk' likelihood of surface water flooding within the scheme extents.

Drainage on the M74 and the M77 where works are to be undertaken consists of gullies which run along either side of the central reserve.

Climate

The Climate Change (Scotland) Act 2009 sets out the target and vision set by the Scottish Government for tackling and responding to climate change (The Climate Change (Scotland) Act 2009). The Act includes a target of reducing CO2 emissions by 80% before 2050 (from the baseline year 1990). The Climate Change (Emissions Reduction Targets) (Scotland) Act 2019 amended the Climate Change (Scotland) Act 2009 to bring the target of reaching net-zero emissions in Scotland forward to 2045 (Climate Change (Emissions Reduction Targets) (Scotland) Act 2019).

The Scottish Government has since published its indicative Nationally Determined Contribution (iNDC) to set out how it will reach net-zero emissions by 2045, working to reduce emissions of all major greenhouse gases by at least 75% by 2030 (Scotland's contribution to the Paris Agreement: indicative Nationally Determined Contribution - gov.scot (www.gov.scot)). By 2040, the Scottish Government is committed to reducing emissions by 90%, with the aim of reaching net-zero by 2045 at the latest.

Transport Scotland is committed to reducing carbon across Scotland's transport network and this commitment is being enacted through the Mission Zero for Transport (Mission Zero for transport | Transport Scotland). Transport is the largest contributor to harmful climate emissions in Scotland. In response to the climate emergency, Transport Scotland are committed to reducing their emissions by 75% by 2030 and to a legally binding target of net-zero by 2045.

Monitoring, Management and Opportunities

To support our journey towards carbon neutral and zero waste we include potential opportunities for enhancement utilising circular economy principals within assessment of material assets.

Amey (working on behalf of Transport Scotland) undertake carbon monitoring. Emissions from our activities are recorded using Transport Scotland's Carbon Management System.

Further information identifying how Amey will obtain the above Carbon Goals can be viewed within the Carbon Management and Sustainability Plan Roadmap to net-zero: STRNMC – Southwest.

Policies and Plans

This Record of Determination (RoD) has been undertaken in accordance with Roads (Scotland) Act 1984 (Environmental Impact Assessment) Regulations 2017 (RSA EIA Regulations) along with Transport Scotland's Environmental Impact Assessment Guidance (Guidance – Environmental Impact Assessments for road projects (transport.gov.scot)). Relevant guidance, policies and plans accompanied with the Design Manual for Roads and Bridges (Design Manual for Roads and Bridges (DMRB)) LA 101 and LA 104 were used to form this assessment.

Description of Main Environmental Impacts and Proposed Mitigation

Air Quality

Impacts

- On site construction activities such as planing of surface and mobile machinery carry a potential to produce airborne particulate matter and generate emissions that may have a temporary impact on local air quality levels
- The impacts identified will be temporary for the duration of the works only and therefore no change is predicted on air quality.
- TM being implemented during the scheme may result in an increase in associated vehicle emissions through idling vehicles and increased congestion.
- Post construction there will be no change to the traffic volume, speed or road alignment.

Mitigation

The following best practice as outlined in the Guidance on the assessment of dust from demolition and construction (2024) published by the Institute of Air Quality Management (IAQM), which includes the following mitigation relevant to this scheme will be followed:

- The site layout will be planned (including plant, vehicles and Non-Road Mobile Machinery (NRMM)) so that machinery and dust causing activities are located away from receptors, as far as reasonably practicable;
- Materials that have a potential to produce dust will be removed from site as soon as possible, unless being re-used on site (cover or fence stockpiles will be used to prevent wind whipping);
- Cutting, grinding or sawing equipment will be fitted or used in conjunction with suitable dust suppression techniques such as water sprays or local extraction, e.g. suitable local exhaust ventilation systems;
- Drop heights from conveyors and other loading or handling equipment will be minimised;
- Vehicles entering and leaving the work area will be covered to prevent escape of materials during transport;
- Equipment will be readily available on site to clean any dry spillages, and clean up spillages as soon as reasonably practicable after the event using wet cleaning methods; and

- When not in use, plant, vehicles and NRMMs will be switched off and there will be no idling vehicles.
- Plant, vehicles and NRMM will be regularly maintained, paying attention to the integrity of exhaust systems to ensure such fuel operated equipment is not generating excessive fumes.
- Green driving techniques will be adopted, and effective route preparation and planning will be undertaken prior to works.
- Where possible, materials will be sourced locally.
- Surfaces will be swept where loose material remains following planing.

No significant effects are predicted on air quality. Therefore, in accordance with DMRB Guidance document LA 105: Air Quality no further assessment is required.

Biodiversity

Impacts

- During night-time programming, misdirected site lighting could cause disturbance to any surrounding nocturnal species.
- During night-time programming, a temporary short term noise increase from construction activities could cause disturbance to any surrounding protected species.
- Works have the potential to cause the spread of Transport Scotland target species including Rosebay willowherb (*Chamaenerion angustifolium*) and Common ragwort (*Jacobaea vulgaris*).

Mitigation

- Where lighting is required, hoods will be used and lights directed at works and away from sensitive ecological receptors, to minimise disturbance to nocturnal and protected species.
- Vehicles and materials will not be stored or parked on grass verges where possible. Where damage occurs, the reinstatement of the grass verge will be carried out.
- In the unlikely event that an INNS is identified on site, all works will temporarily stop, and the environment team contacted.
- As part of the Network Management Contract, Amey, on behalf of transport Scotland, have been asked to keep a record of various target species, including Rosebay willowherb and common ragwort. Works will not cause the spread of this species, if works are likely to result in the spread of this species through disturbance, the appropriate Amey landscaping team will be consulted.

- Noise mitigation measures as outlined in the Noise and Vibration section and pollution control mitigations as outlined in the Road Drainage and the Water Environment section will be adhered to during the works.

With the above mitigation measures and best practice being adhered to, the residual effect on biodiversity is considered not significant.

Therefore, in accordance with DMRB Guidance document LA 108: Biodiversity, no further assessment is required.

Material Assets and Waste

Impacts

- The design life for the TS2010 surfacing proposed is estimated to be 20 years. This will reduce the requirement for maintenance to this section of road over the period.
- The works will result in contribution to resource depletion through use of virgin materials.
- Transportation and recovery of materials/waste will require energy deriving from fossil fuel, a non-renewable source.
- GHG emissions will be generated by material production and transportation to and from site.
- Tar bound materials were not identified during the investigation coring.

Mitigation

- Materials will be derived from recycled, secondary or re-used origin as far as practicable within the design specifications to reduce natural resource depletion and associated emissions.
- Materials will be delivered on site at the time of being implemented.
- The Contractor will comply with all ‘Duty of Care’ requirements, ensuring that any surplus materials or wastes are stored, transported, treated, used, and disposed of safely without endangering human health or harming the environment. All waste transfer notes and/or waste exemption certificates (if required) will also be completed and retained.
- Uncontaminated road planings arising from the works will be fully recycled under a SEPA Paragraph 13(a) Waste exemption in accordance with guidance on the Production for Fully Recovered Asphalt Road Planings.
- Use of TS2010 will reduce the usage of imported aggregates and increase the use of a wider range of sustainable aggregate sources thus reducing GHG emissions.

- Where possible all materials will be reused throughout the network, if not possible they will be recycled locally.
- Waste will be stored in suitable containers and covered.
- It is Amey policy to reuse or recycle as much waste material as possible. Where recycling is not feasible, waste material will be removed to a licenced waste facility.

It has been determined that the proposed project will not have direct or indirect significant effects on the consumption of material assets or creation of waste.

Therefore, in accordance with DMRB Guidance document LA 110: Material Assets and Waste, no further assessment is required.

Noise and Vibration

Impacts

- Construction activities associated with the proposed works have the potential to cause noise and vibration impacts to nearby noise sensitive receptors, through the use of paver planers and roller wagons during night-time hours.
- TS2010 road surfacing is shown to have superior durability and noise reducing features compared to standard road surfacing mixes.
- There are no anticipated permanent impacts on noise and vibration following the completion of works.

Mitigation

- Due to night-time programming, Amey's Sustainability Solutions team has notified Glasgow City Council in advance of the works.
- The noisiest works (planing) will be completed before 23:00 where feasible.
- The use of a soft start to the works, whereby plant/machinery is turned on sequentially as opposed to simultaneously.
- Effects from noise will be kept to a minimum through the use of appropriate mufflers and silencers fitted to machinery. All exhaust silencers will be checked at regular intervals to ensure efficiency.
- No plant, vehicles or machinery will be left idling when not in use.
- Amey's environmental briefing on noise and vibration will be delivered to all site operatives before works start.

With best practice mitigation measures in place, the residual construction effects associated with Noise and Vibration is considered not significant.

Therefore, in accordance with DMRB Guidance document LA 111: Noise and Vibration no further assessment is required.

Population and Human Health

Impacts

- Core paths, pedestrian access and cycleways surrounding the scheme will be unaffected and will remain open during the works due to the works only being undertaken within the carriageway boundary.
- Construction site lighting during night-time hours could cause disturbance for residential properties in close proximity, and for the nearby amenity users.
- There is no requirement for temporary or permanent land take as the site works take place all within the carriageway boundary.
- Vehicle travellers and nearby receptors will benefit from the improved road surfacing as a result of the scheme.
- Nearby residents of surrounding settlements may experience travel disruption due to presence of TM, which may lead to increased journey times.

Mitigation

- TM restrictions/arrangements and any expected travel delays will be publicised within the local and wider area via radio and letterbox drop, in an effort to minimise disturbance to vehicular travellers.
- Temporary site lighting used throughout the scheme will be directional and pointed only at the area of works.
- Site specific control measures regarding noise and vibration and air quality can be found in the relevant sections (above).

With best practice mitigation measures in place, no significant effects associated with Population and Human Health are predicted.

Therefore, in accordance with DMRB Guidance document LA 112: Population and Human Health no further assessment is required.

Road Drainage and the Water Environment

Impacts

- If not adequately controlled, debris and run off from the works could be suspended in drainage systems. In the event of a flooding incident, this debris

may be mobilised and could enter the road drainage having a detrimental effect on the surrounding local water environment.

- Potential for spills, leaks or seepage of fuels and oils associated with plant to escape and reach drainage systems and watercourses if not controlled, which may adversely impact the water environment.
- There are not anticipated to be any permanent impacts on road drainage or the water environment following the completion of works.
- Should flooding occur, this may delay the scheduled works.

Mitigation

- Debris and dust generated as a result of the works will be prevented from entering the drainage system. This can be via the use of drain covers or similar. The surface water flooding will be managed by the drainage system already in place within the carriageway consisting of gullies.
- Appropriate measures will be implemented onsite to prevent any potential pollution to the natural water environment (e.g., debris, dust, and hazardous substances). This will include spill kits being present onsite at all times, and the use of funnels and drip trays when transferring fuel etc. There will be no fuel stored onsite.
- All debris which has the potential to be suspended in surface water and wash into the local water environment will be cleaned from the site both during and following the works.
- Visual pollution inspections of the working area will be conducted in frequency, especially during heavy rainfall and wind.
- Weather reports will be monitored prior and during all construction activities. In the event of adverse weather/flooding events, all activities will temporarily stop, and only reconvene when deemed safe to do so, and run-off/drainage can be adequately controlled to prevent pollution.
- The Amey control room will be contacted if any pollution incidences occur (24 hours, 7 days a week).

Providing all works operate in accordance with current best practice, as demonstrated by SEPA's GPPs, the residual effect on the local water environment during construction is considered to be not significant.

In accordance with DMRB Guidance document LA 113: Road drainage and the water environment, no further assessment is required.

Climate

Impacts

- GHG emissions will be emitted through the use of machinery, vehicles and materials used (containing recycled and virgin materials) and transporting to and from site.

Mitigation

- Local suppliers will be used as far as reasonably practicable to reduce travel time and GHG emitted as part of the works.
- Vehicles/plant will not be left on when not in use to minimise and prevent unnecessary emissions.
- Further actions and considerations for this scheme are detailed in the above Material assets and waste section.

With best practice mitigation measures in place, the residual significance of effect on climate is considered to be neutral. Therefore, in accordance with DMRB Guidance document LA 114: Climate, no further assessment is required.

Vulnerability of the Project to Risks

As the works will be limited to the like-for-like resurfacing of the carriageway, there will be no change in vulnerability of the road to risk, or in severity of major accidents/disasters that would impact on the environment.

The Traffic Management Plan ensures that there is no severance of community assets, access routes or residential developments.

All mitigation measures will be adhered to onsite which considers the vulnerability of the project to be low.

It has been determined that the project is not expected to alter the vulnerability of the existing trunk road infrastructure to risk of major accidents or disasters.

Assessment Cumulative Effects

The Scottish Road Works Commissioner's Interactive Map has not highlighted any works during the proposed timescale and at the location of the proposed works.

Ameys Currently Programme of works has not highlighted any other works during the proposed timescale at the location of the proposed works and surrounding area.

Any future schemes will be programmed to take into account already programmed works, and as such any effect (such as from TM arrangements and potential construction noise) will be limited.

Overall, it is unlikely the proposed works will have a significant cumulative effect with any other proposed works in the local area. Considering the nature and scale of the maintenance works being undertaken no in combination effects are anticipated.

Assessments of the Environmental Effects

Following assessment as detailed within this Record of Determination, and provided that mitigation measures are in place and best practice is followed, the residual impact is deemed neutral and there will be no significant effects on the environment.

The following environmental surveys/reviews have been undertaken:

- An Environmental Scoping Assessment undertaken by the Sustainable Solutions team at Amey in June 2024.

Statement of case in support of a Determination that a statutory EIA is not required.

This is a relevant project in terms of section 55A(16) of the Roads (Scotland) Act 1984 as it is a project for the improvement of a road and the completed works (together with any area occupied by apparatus, equipment, machinery, materials, plant, spoil heaps, or other such facilities or stores required during the period of construction) exceed 1 hectare in area.

The project has been subject to screening using the Annex III criteria to determine whether a formal Environmental Impact Assessment is required under the Roads (Scotland) Act 1984 (as amended by The Roads (Scotland) Act 1984 (Environmental Impact Assessment) Regulations 2017). Screening using Annex III criteria, reference to consultations undertaken and review of available information has not identified the need for a statutory EIA.

The project will not have significant effects on the environment by virtue of factors such as:

Characteristics of the scheme:

- As the works will be limited to the like-for-like replacement of the structural components, there is no change to the vulnerability of the road to the risk or severity of major accidents/disasters that would impact on the environment. No impacts on the environment are expected during the operational phase as a result of works.
- The successful completion of the scheme will afford benefits to carriageway users and residential properties in proximity, due to improved condition and ride quality of the carriageway surface.
- No negative impacts on the environment are expected during the operational phase as a result of works. The use of TS2010 road surfacing affords the benefits of a reduction in mid to high frequencies of traffic noise and a reduction in ground vibrations. As a result, ambient noise levels will decrease post construction.
- Construction activities are restricted to the existing carriageway boundary within made ground and as such there will be no residual change to the local landscape as a result of the works.
- Works are not expected to result in significant disturbance to protected species that may be present in the wider area.
- At end of life, components can be recycled, reducing waste to landfill.
- The design option conveys sustainability benefits by significantly reducing the quantity of maintenance interventions required at the location.

Location of the scheme:

- The scheme will be confined within the existing carriageway boundaries (total area 1.96ha) and as a result will not require any land take and will not alter any local land uses.
- The scheme is not situated in whole or in part in a “sensitive area” as listed under regulation 2 (1) of the Environmental Impact Assessment (Scotland) Regulations 1999 (as amended).

Characteristics of potential impacts of the scheme:

- Containment measures of the working area will be in place to prevent debris or pollutants from entering the surrounding water environment and drainage.
- Measures will be in place to ensure appropriate removal and disposal of waste and any uncontaminated road planings will be recycled in accordance with Guidance on the Production for Fully Recovered Asphalt Road Planings.
- Materials will be derived from recycled, secondary or re-used origin as far as practicable within the design specifications.
- Any potential impacts of the works are expected to be temporary, non-significant, and limited to the construction phase.
- No in-combination effects have been identified.

References of Supporting Documentation

- An Environmental Scoping Assessment undertaken by the Sustainability Solutions team at Amey in June 2024.

Annex A

"Sensitive area" means any of the following:

- land notified under sections 3(1) or 5(1) (sites of special scientific interest) of the Nature Conservation (Scotland) Act 2004
- land in respect of which an order has been made under section 23 (nature conservation orders) of the Nature Conservation (Scotland) Act 2004
- a European site within the meaning of regulation 10 of the Conservation (Natural Habitats, &c.) Regulations 1994
- a property appearing in the World Heritage List kept under article 11(2) of the 1972 UNESCO Convention for the Protection of the World Cultural and Natural Heritage
- a scheduled monument within the meaning of the Ancient Monuments and Archaeological Areas Act 1979
- a National Scenic Area as designated by a direction made by the Scottish Ministers under section 263A of the Town and Country Planning (Scotland) Act 1997
- an area designated as a National Park by a designation order made by the Scottish Ministers under section 6(1) of the National Parks (Scotland) Act 2000.

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Published by Transport Scotland, July 2024

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