

# National Environmental Assessment and Sustainability (NEAS)

## Internal Environmental Assessment

### Environmental Action Plan

<b>Project name</b>	Preston and South Ribble Flood Risk Management Scheme: Areas 1 and 2
<b>Project 1B1S reference</b>	ENV0000009C
<b>Area</b>	North West
<b>Date</b>	February 2021
<b>Version number</b>	03
<b>Author</b>	Jacobs (various)

### Revision history

Revision date	Summary of changes	Author	Version number
15/02/2021	First draft	Jacobs (Various)	1
15/05/2021	Updated following Planning Approval	Jacobs (Various)	2
04/08/2021	Minor changes following input from Contractor and survey information	Jacobs (Various)	3

### EAP Approvals

Name	Signature	Title	Date	Version

### Distribution

Name	Title	Date	Version

---

## Purpose

This Environmental Action Plan (EAP) summarises the actions required to manage specific environmental issues on a project. These actions are often connected with specific commitments made to others through consultation, planning, permitting and other regulatory mechanisms. It does not cover more generic requirements of environmental risk management and site good environmental practice.

These actions form part of the contract documentation and must be adhered to.

## Roles

Each action in the table below has **one** named person who is responsible for ensuring that the action is implemented. It is ultimately the contractor's responsibility for ensuring the EAP commitments, are delivered.

NEAS are responsible for agreeing any changes to the EAP and for signing off, or agreeing to the signing off, of the actions.

The contractor and Project Manager are responsible for advising NEAS on any changes to method statements or the planned construction work as these may result in changes to the EAP or additional consultation with statutory consultees. NEAS will assess the significance of these changes and determine the appropriate course of action.

The contractor is also responsible for implementing good environmental practice on site, in line with their own Environmental Management System (EMS). The Environmental Clerk of Works (ECoW) will monitor adherence to the EMS. Typical issues include:

- Any working hour restrictions
- Dust suppression measures
- Traffic management
- Site waste management
- Materials management
- Maintenance of the carbon calculator
- Vehicle maintenance and management
- Pollution prevention and control (including storage, refuelling and incident response)
- Response procedures e.g. services strike, contaminated land
- Hazardous materials handling and storage
- Noise management
- Securing and delineation of working areas including signage

## Environmental Audits

The appended template should be used when undertaking any site audits during construction. Such audits can be undertaken by NEAS Environmental Project Managers (EPM) or delegated by NEAS to the ECW or other individuals. Technical assistance can be obtained from functional staff as appropriate. Site audits can potentially highlight good practice and can be separate to the review of EAP actions as undertaken in progress meetings. They do not replace the regular checks undertaken by the ECW during the works; no set template has been provided for this.

## Environmental Incident Reporting System

All environmental incidents must be reported to the Environment Agency Incident Hotline 0800 80 70 60 as per the [Environmental Incident Reporting Poster](#) at the earliest opportunity and then to the Engineering and Construction Contract (ECC) Project Manager, Site Supervisor, Environment Agency Project Manager and Environment Agency NEAS Environmental Project Manager. In addition, near misses must be reported via the hotline where there was/is the potential for a significant impact and where lessons can be learned.

Initial reports for such incidents and near misses must be followed by a written report using the contractor's in-house forms. This must include the following information (project/location, date, contractor, National Incident Recording System (NIRS) reference number, details of what happened, cause of incident, lessons learned). This final and comprehensive investigation report is to be provided by the Contractor to the ECC Project Manager, Environment Agency Project Manager and Safety, Health and Environment Manager within 14 days.

## Summary of Scope of Works

The Environment Agency are proposing to improve flood protection to the multiple areas of Preston and South Ribble. The proposed Scheme itself would primarily be constructed along the alignment of existing defences on the north and south banks of the River Ribble, with some requirement for new revetment works, and works to an existing railway culvert to prevent outflanking.

See General Arrangement drawings

ENV0000009C-JAC-ZZ-41A-DR-PL- 0001 to 0003

ENV0000009C-JAC-ZZ-41B-DR-PL-0001 to 0003

ENV0000009C-JAC-ZZ-41C-DR-PL-0001 and

ENV0000009C-JAC-ZZ-41D-DR-PL-0001

## Relevant Contact Details

<b>Project Sponsor</b>	TBC
<b>Project Executive</b>	Stuart Martin
<b>Project Manager</b>	Alison Roberts
<b>NEAS</b>	Connor McIlwrath
<b>ECW</b>	TBC
<b>Contractor</b>	VolkerStevin
<b>Site Supervisor</b>	TBC

**Preston and South Ribble Flood Risk Management Scheme: Areas 1 & 2, Environmental Action Plan**

## Environmental Action Plan

Ref. No.	Objective	Action	Responsibility	Reference to further information	Progress and Further Action	Sign off and date
<b>Pre-construction</b>						
A0. APPROVALS						
A0-1	To secure necessary permission for works from the Environment Agency (EA).	Undertake consultation with EA to secure the necessary approvals/exemptions for works within a flood risk zone and on existing flood defence, prior to works commencing.	Contractor			
A0-2	To secure necessary permission/approval for works from Natural England.	Undertake consultation with Natural England, sufficient to secure exemptions/ approval for works in proximity to the River Ribble Marine Conservation Zone (MCZ) and upstream of Ribble and Alt Estuaries Ramsar and SPA.	Environment Agency NEAS	Marine Conservation Zone Assessment ENV0000009C-JAC-XX-00-RP-EN-0002  Stage 1 Habitats Regulations Assessment ENV0000009C-JAC-XX-00-RP-EN-0004	Stage 1 HRA concludes no Likely Significant Impacts to Ribble Estuary and Alt SPA or the Ramsar of the same name.  Natural England responded to the planning application 22 <sup>nd</sup> February 2021 (NE Ref 340599) with no objection to the planning application and no significant impact upon the designated sites.	
A0-3	To secure necessary permissions for proposed works from Utilities Companies including United Utilities (UU), North West Electricity, National Grid Gas plc.	Undertake consultation with UU/National Grid/North West Electricity to secure the necessary exemptions/approvals prior to the works commencing.	Jacobs Project Manager		Affected utilities companies have been consulted throughout design process and utility diversions have been designed.  Discussions ongoing.	

## Preston and South Ribble Flood Risk Management Scheme: Areas 1 & 2, Environmental Action Plan

A0-4	To secure necessary permissions for proposed works around Listed Bridges (Penwortham Old Bridge, and West Coast Mainline Viaduct), Historic Park (Avenham and Miller Park), and Scheduled Monument (Penwortham Old Bridge).	Undertake consultation with Historic England, sufficient to secure consent for proposed works, and efficient application for Listed Building Consent, and Scheduled Monument Consent.	EA NEAS	Heritage Statement ENV0000009C-JAC-XX-00-RP-EN-0003	Consultation undertaken with Historic England regarding the works in the proximity of Avenham and Miller Park and the West Coast Mainline dated 27 <sup>th</sup> October.  Listed Building Consent applied for as part of the planning application for Areas 1 & 2  Planning Application approved 26 <sup>th</sup> April 2021. See LCC decision notice LCC.2021.0002	
A0-5	To secure necessary permissions for proposed works within the River Ribble channel from the Marine Management Organisation.	Undertaken consultation with the Marine Management Organisation sufficient to secure consent for proposed works.	EA NEAS		EIA Screening Opinion has been sought from the MMO. MMO returned a decision on 8 <sup>th</sup> January (MMO ref 2020/00040) stating an ES was not required.	
A0-6	To secure necessary permissions for proposed works within the River Ribble channel from the Marine Management Organisation	Application for a marine licence to undertake the works required  Up to 13 weeks determination period apply on line.	EA NEAS		ER and associated documentation  ENV0000009C-JAC-ZZ-RP-00-EN-0005	
<b>A1 HUMAN POPULATION</b>						
A1-1	To communicate information about the proposed works to the public.	Undertake consultation with affected landowners and tenants to advise of the proposed nature and timing of the works, and to make arrangements for access to site and erection of compounds (Portway Park and Ride, Broadgate Gardens, and Preston Sports Club).  Provide name and contact details for queries or concerns.	Contractor			

## Preston and South Ribble Flood Risk Management Scheme: Areas 1 & 2, Environmental Action Plan

A1-2	To communicate information about the proposed works to the public.	<p>Notice of entry to be issued at least 7 days before the works.</p> <p>Include clear details of the nature and timings of the works.</p> <p>Install temporary notice boards at locations to be agreed with council to keep site users up to date with the Scheme.</p>	EA Project Manager			
------	--	---	--------------------	--	--	--

**Preston and South Ribble Flood Risk Management Scheme: Areas 1 & 2, Environmental Action Plan**

A1-3	To maintain safe public access during works.	<p>Plan works to ensure safe access to public areas while works are being undertaken. To be aware of sensitive locations for example, continued safe access to and use of Avenham and Miller Park, Preston Sports Club, Penwortham Methodist Church, Allotments along Valley Road, Tinkerbells Day Nursery.</p> <p>Ensure works remain protected out of working hours to maintain public safety and secure the works areas.</p>	Contractor		<p>Site access shall be via accepted routes agreed in advance with the local council(s), Lancashire County Council Highways Authority, and landowners where necessary.</p> <p>Temporary diversions will be required to following Public Rights of Way:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> National Cycle Route (NCR) 55;</li> <li><input type="checkbox"/> NCR 62;</li> <li><input type="checkbox"/> The Preston Guild Wheel that follows the existing footpath along Broadgate;</li> <li><input type="checkbox"/> The Ribble Way long distance path that follows the existing footpath along Broadgate;</li> <li><input type="checkbox"/> 7-9-FP20, that meets the Golden Way footpath close to where the small embankment is proposed;</li> <li><input type="checkbox"/> 7-9-FP21 which forms a part of the Golden Way footpath;</li> <li><input type="checkbox"/> 7-9-FP22 which forms a part of the Golden Way footpath; and</li> <li><input type="checkbox"/> 7-9-BW34 that runs along the River Ribble between the existing embankment and the river channel in Area 2</li> </ul>	
------	--	---	------------	--	--	--

## Preston and South Ribble Flood Risk Management Scheme: Areas 1 & 2, Environmental Action Plan

A2 LAND USE AND AMENITY						
A2-1	To record the condition of site prior to works being undertaken.	Undertake a pre-works condition survey (including photos) of all works areas and access routes.	Contractor			
A2-2	To provide continuing safe pedestrian routes and recreational amenity.	<p>Confirm that public footpaths and cycle paths not requiring closure or temporary diversions will be fenced off and secured from the works.</p> <p>Pedestrian access to residential properties along closed roads to be maintained</p>	Contractor	<p>Security fencing to be erected to perimeter of agreed working areas – as shown on GA plans</p> <p>ENV0000009C-JAC-ZZ-41A (and 41B)-DR-PL-0001 to 0003 and</p> <p>ENV0000009C-JAC-ZZ-41C (and 41D) -DR-PL-0001</p>		
A2-3	To obtain consent from Lancashire County Council for temporary diversions to Public Rights of Way.	<p>Obtain necessary consent for temporary diversion / closure of public rights of way / National Cycle Route:</p> <p>BW-12 on the left bank of the River Ribble from the West Coast Mainline to Riverside;</p> <p>FP-20 from Valley Road to FP-21;</p> <p>FP-21 from the B5254 to FP-22;</p> <p>The Guild Wheel (National Cycle Route 622) from Liverpool Road Bridge to the West Coast Main Line.</p> <p>Lancashire County Council to advise of the proposed nature and timings of the works, and to agree arrangements for temporary access, signage, and footpath and cycle path diversions.</p>	Contractor	<p>Environmental Constraints Plan ENV0000009C-JAC-ZZ-ZZ-DR-EN-0001</p> <p>Proposed PRow Diversion Routes ENV0000009C-JAC-XX-ZZ-DR-EN-0001</p>		
A3 BIODIVERSITY, FLORA & FAUNA						



## Preston and South Ribble Flood Risk Management Scheme: Areas 1 & 2, Environmental Action Plan

A3-1	Minimise risk of direct and indirect impacts on species during construction.	<p>Working methods and Construction Environment Management Plan (CEMP) to incorporate protection measures to avoid impacts during construction, including:</p> <p>No night time working, including dusk and pre-dawn;</p> <p>All excavations to be covered at night: site compounds and construction machinery to be positioned in areas of existing hardstanding or amenity grassland;</p> <p>No piles of brash from cut vegetation to be stockpiled on site;</p> <p>Existing haul routes and access tracks to be used where possible; and</p> <p>Where required for security and / or health and safety, use of low-spill directional lighting.</p>	Contractor	<p>Preliminary Ecological Appraisal (Mott MacDonald 2019a), ENV0000009C-MMD-DZ-00-RP-EN-0303001</p> <p>Verification Survey (Jacobs 2020) ENV0000009-JAC-ZZ-00-MO-BD-0001</p>		
A3-2	To avoid impacts on bats.	Plan all works to be undertaken in daylight hours to avoid requirement for artificial lighting. Where required for security and/or health and safety, use low-spill directional lighting.	Contractor		No trees relative to the locations of works are identified as having bat roost potential.	
A3-3	Minimise risk of direct or indirect impacts through pollution incidents for all MCZ features located in the River Ribble.	<p>Adapt contractor's standard pollution control measures for working in and near water to ensure they are adequate e.g. check surface water drainage gulley condition and install drain cover mats in working area to prevent surface water run-off contamination during works.</p> <p>Silt fencing erected to perimeter of stockpile bunds.</p>	Contractor	Marine Conservation Zone Assessment ENV0000009C-JAC-XX-00-RP-EN-0002	In-channel works will take place outside of Smelt migration period. No in-channel works in the period 1 <sup>st</sup> February to 15 <sup>th</sup> June.	

**Preston and South Ribble Flood Risk Management Scheme: Areas 1 & 2, Environmental Action Plan**

A3-4	To prevent spread of invasive non-native terrestrial plant species (INNS).	Incorporate specific control measures for species known to be present within working areas (Himalayan Balsam, Japanese Knotweed, and Giant Hogweed).	Contractor	<p>Follow best practice laid out in</p> <p><a href="http://www.nonnativespecies.org/checkcleandry/index.cfm">http://www.nonnativespecies.org/checkcleandry/index.cfm</a></p> <p>Invasive Non-Native Species Report</p> <p>ENV0000009C-JAC-XX-00-RP-EN-0005</p>		
A3-5	To minimise impacts to breeding birds.	<p>Plan all vegetation clearance to be undertaken between September and February inclusive. Where this is not possible, pre-site clearance checks will be required no more than 24 hrs in advance of vegetation clearance (March – August inclusive). If active nests are found works may not commence within 10 m until young have fledged.</p> <p>All cut woody vegetation to be chipped and removed from site.</p> <p>No brash piles to be left within the construction working area.</p>	Contractor			

## Preston and South Ribble Flood Risk Management Scheme: Areas 1 & 2, Environmental Action Plan

A3-6	Minimise impacts on trees/hedgerows.	<p>Where practicable, adjust works locations to outside of the root protection areas as advised by the arboriculturist.</p> <p>Ground protection requirements, where required.</p> <p>Access requirements to be set out with the advice of the arboriculturist to minimise impact on canopies and branch removal.</p> <p>Where there is potential for clash with any root zone, fence off or otherwise demarcate root protection zones at outset to prevent accidental excavation or tracking in these areas. Works should follow standard tree protection measures (BS 5837: 2012) to avoid impacts to root systems.</p> <p>Where locations cannot be moved outside the RPA, hand digging to the appropriate depth to avoid substantial roots will be utilised where practicable and under an arboricultural watching brief.</p>	Contractor	<p>Arboricultural Impact Assessment</p> <p>ENV0000009C-JAC-XX-00-RP-EN-004</p>		
A3-7	To avoid significant impacts on otter, otter habitats, and to comply with its protected species status.	<p>Pre-construction survey to be undertaken 2-3 months before any construction works to confirm the findings of otter surveys i.e. that there are no otter holts or laying-up areas are at risk of disturbance.</p> <p>If evidence is found, then a mitigation plan and possibly a European Protected Species Licence will be required.</p>	Jacobs	<p>Otter survey</p> <p>ENV0000009C-JAC-ZZ-00-BD-0002</p>	<p>Survey undertaken 3<sup>rd</sup> August 2021 by Jacobs confirms original findings i.e. that there are no otter holts or laying-up areas are at risk of disturbance.</p>	
A4 LANDSCAPE & VISUAL EFFECTS						

## Preston and South Ribble Flood Risk Management Scheme: Areas 1 & 2, Environmental Action Plan

A4-1	<p>Avoid damage and reinstatement requirements to existing infrastructure, paving, kerbs, edgings, and soft landscape areas including trees and their root protection areas, particularly in the vicinity of Avenham and Miller Park.</p> <p>Construction access routes and spoil storage within parkland / amenity grassland to be minimised, avoiding soft landscape areas where feasible to do so.</p>	<p>Plan works areas and access routes to minimise likelihood of reinstatement requirements.</p> <p>Plan for and provide temporary ground protection and site fencing in accordance with British Standard (BS) 5837:2012 in advance of commencement of works. Protective fencing will be erected on the alignments shown on the Tree Protection Plans.</p> <p>All proposed tree works should be carried out by a suitable qualified and insured contractor, preferably registered with the Arboricultural Association. Tree work must be carried out in accordance with BS 3998:2010 – “Tree Work – Recommendations”.</p>	Contractor	<p>Arboricultural Impact Assessment ENV0000009C-JAC-XX-00-RP-EN-004</p> <p>British Standard (BS) 5837 (2012), “Trees in relation to design, demolition and construction – Recommendations”</p>		
A4-2	<p>Minimise visual impacts on sensitive receptors in close proximity to the working area, particularly users of PRowS in the vicinity, users of Avenham and Miller Park.</p>	<p>Plan works areas, construction access and site compounds including welfare units to minimise likely visual intrusion for neighbouring residents and other visual receptors.</p>	Contractor	<p>GA plans</p> <p>ENV0000009C-JAC-ZZ-41A (and 41B)-DR-PL-0001 to 0003 and</p> <p>ENV0000009C-JAC-ZZ-41C (and 41D) -DR-PL-0001</p>		
<b>A5 WATER ENVIRONMENT</b>						
A5-1	<p>To comply with the requirements of the Water Framework Directive</p>	<p>Implement WFD mitigation requirements identified through Clearing Waters for All assessment.</p> <p>Enter project details on the WFD Compliance register</p>	<p>Contractor</p> <p>Environment Agency NEAS</p>	<p>Water Framework Directive Detailed Assessment ENV0000009C-JAC-XX-00-RP-EN-0001</p>		
<b>A6 HISTORIC ENVIRONMENT</b>						

## Preston and South Ribble Flood Risk Management Scheme: Areas 1 & 2, Environmental Action Plan

A6-1	To minimise impacts on the Registered Park and Garden	Plan works areas, construction access and site compounds including welfare units to minimise likely visual intrusion into the Registered Park.	Contractor	GA plans ENV0000009C-JAC-ZZ-41A (and 41B)-DR-PL-0001 to 0003 and ENV0000009C-JAC-ZZ-41C (and 41D) -DR-PL-0001		
A6-2	To minimise impacts on the West Coast Mainline Listed Viaduct and Penwortham Old Bridge	Plan tie-in to be sympathetic to the structure of the bridges	Contractor	Listed Building Consent applied for as part of the Planning Application	Planning Application approved 26 <sup>th</sup> April 2021. See LCC decision notice LCC.2021.0002	
<b>A7 GROUND CONDITIONS</b>						
A7-1	To minimise impact of potentially contaminated land.	Undertake risk assessment for the detailed design solution and develop remedial strategy.	Contractor	Geoenvironmental Assessment ENV0000009C-JAC-ZZ-00-AS-EN-0001	Recommended that the Contractor's risk assessment / method statements and SHE boxes on drawings are updated to include the potential ground contamination risks to workers.	
<b>A8 NOISE &amp; VIBRATION</b>						
A8-1	To minimise impact of construction related noise and vibration on local population	Restrict the timings of noisy construction to no more than a period of ten or more days of working in any fifteen consecutive days; or a total number of days exceeding forty in any six consecutive months.	Contractor	Construction Noise Report ENV0000009C-JAC-ZZ-TN-EN-0001  Ref CEMP when available	CEMP will provide detail	
<b>A9 TRAFFIC &amp; TRANSPORT</b>						
A9-1	To prevent obstruction and nuisance by works traffic.	Liaison and necessary consent for Highways works / closures / diversions to be obtained from Lancashire County Council Highways Authority	Contractor	Ref CEMP when available	CEMP will provide detail	
A9-2	Minimise obstruction from works traffic and equipment, on access routes/tracks.	Immediately prior to the start of the works, erect clearly visible warning notices on all access routes, where required.	Contractor	Ref CEMP when available	CEMP will provide detail	

## Preston and South Ribble Flood Risk Management Scheme: Areas 1 & 2, Environmental Action Plan

During construction						
B1 HUMAN POPULATION						
B1-1	To minimise disruption to the local community.	Keep landowners, members of the public and tenants informed of progress of the works.  Work within defined hours only.	Contractor	Planning Application approved 26 <sup>th</sup> April 2021. See LCC decision notice LCC.2021.0002  Hours defined in decision notice are  0800 to 1800 Monday to Friday  0900 to 1400 Saturdays.		
B1-2	To maintain safe public access during the works.	Ensure safe access to public areas while works are being undertaken, including continued safe access to and use of Avenham and Miller Park.  Ensure works remain protected out of working hours to maintain public safety and secure the works areas.	Contractor	Ref CEMP when available	CEMP will provide detail	
B2 LAND USE AND RECREATION						

## Preston and South Ribble Flood Risk Management Scheme: Areas 1 & 2, Environmental Action Plan

B2-1	To provide continuing safe pedestrian routes. Footpath/cyclepath users to be subject to minimal inconvenience.	<p>Display signs along PRowWs that have been identified as requiring a temporary closure. This signage is to be maintained throughout the duration of works and the temporary closures enforced.</p> <p>Diversion periods are to be kept to a minimum and ensure that local residents are well informed of works and a consistent means of public liaison is in place.</p>	Contractor	Proposed PRow Diversion Routes ENV0000009C-JAC-XX-ZZ-DR-EN-0001	<p>It is permissible for vehicles to track along a PRow assuming the following provisos are met:</p> <p>The public will have priority over vehicles at all times whilst moving;</p> <p>A banksman will be present when plant is moving around the site;</p> <p>The vehicle does not obstruct any part of the PRow whilst stationary;</p> <p>The work site does not extend over or include any part of the PRow;</p> <p>A safe work site can be maintained without the need to encroach on and/or obstruct the PRow.</p>	
B3 BIODIVERSITY, FLORA & FAUNA						
B3-1	To minimise risk of direct or indirect impacts through pollution incidents on: habitats for MCZ fish species in the River Ribble.	Weekly inspections of work area to ensure compliance with Flood Risk Activity Permit and daily inspection of silt fence around stockpiled material to prevent silt runoff.	Contractor			

## Preston and South Ribble Flood Risk Management Scheme: Areas 1 & 2, Environmental Action Plan

B3-2	To minimise risk of direct or indirect impacts through spread or introduction of non-native species and pathogens.	<p>Ensure compliance with control measures (including biosecurity measures), especially at the start of works when all plant and equipment should be inspected.</p> <p>Incorporate 'check, clean, dry' approach, especially at the beginning and end of the works when plant etc. will be moving between different locations:</p> <p>Ensure vehicles are cleaned regularly to remove any accumulated mud, especially from wheels and wheel arches.</p> <p>Ensure tools are cleaned on a daily basis to reduce the risk of transporting plant fragments and soil between different sections of the site.</p> <p>Maintain Personal Protective Clothing, i.e. cleaning footwear at the beginning and end of a work day</p>	Contractor	<p>Follow best practice laid out in</p> <p><a href="http://www.nonnativespecies.org/checkcleandry/index.cfm">http://www.nonnativespecies.org/checkcleandry/index.cfm</a></p> <p>Invasive Non-Native Species Report</p> <p>ENV0000009C-JAC-XX-00-RP-EN-0005</p>		
B3-3	To minimise risk of killing or injuring fish during installation Redi-Roc revetment	Undertake a fish rescue of any areas to be temporarily de-watered.	Contractor		Contractor to liaise with EA re fish rescue requirements	



**Preston and South Ribble Flood Risk Management Scheme: Areas 1 & 2, Environmental Action Plan**

B3-4	To avoid impacts on trees and hedgerows.	<p>For locations which are within the Root Protection Area (RPA) works should be supervised by an arboriculturist and excavations hand-dug to the appropriate depth to avoid substantial roots. Utilise ground protection for machinery tracking over root systems.</p> <p>If any tree works (including pruning) are required, the landowner should be notified. All proposed tree works should be carried out by a suitably qualified contractor preferably registered with the Arboricultural Association. Tree work should be carried out in accordance with BS 3998:2010 – “Tree Work - Recommendations.”</p>	Contractor	<p>Arboricultural Impact Assessment ENV0000009C-JAC-XX-00-RP-EN-004</p> <p>British Standard (BS) 5837 (2012), “Trees in relation to design, demolition and construction – Recommendations”</p>		
B3-5	To protect of habitats and species.	<p>The ECoW to maintain an audit trail throughout construction and to communicate non-compliance with agreed best working procedures.</p> <p>No additional habitats beyond what has already been approved for the proposed Scheme should be removed or modified.</p>	Contractor and ECoW			

## Preston and South Ribble Flood Risk Management Scheme: Areas 1 & 2, Environmental Action Plan

B3-6	Protect and enhance rare, notable species and comply with legislation (breeding birds).	<p>Ongoing vegetation management to minimise risk of bird nesting in the working areas.</p> <p>If vegetation clearance is necessary during nesting bird season - end of February to end August- an inspection will be undertaken to establish the area is clear of nesting birds or active nests, no more than 24 hours prior to start of works.</p> <p>If nests are found or suspected during construction, all works should cease until ecologist confirms no nesting activity. Maintain necessary exclusion zones.</p>	Contractor and ECoW			
B4 LANDSCAPE & VISUAL EFFECTS						
B4-1	To avoid reinstatement requirements.	Use temporary ground protection to cover and protect hard and soft landscape areas and features including grass areas, to avoid/reduce reinstatement requirements on completion of works.	Contractor			
B4-2	To minimise visual impacts.	Notify immediate residential and commercial neighbours prior to commencement of tree clearance or visually intrusive construction operations.	Contractor			
B5 WATER ENVIRONMENT						
B5-1	To prevent accidental release of harmful pollutants or hydraulic fluids into river or groundwater.	Brief site staff prior to works regarding storage of hazardous materials and contaminants and have spill response procedures in place.	Contractor			
B6 HISTORIC ENVIRONMENT						

## Preston and South Ribble Flood Risk Management Scheme: Areas 1 & 2, Environmental Action Plan

B6-1	To ensure that unrecorded remains, if encountered during works, are not damaged by excavation.	<p>Brief site staff prior to works regarding the need to remain vigilant during excavations and the procedure to follow should suspected archaeology be found.</p> <p>If (suspected) items found, works will be halted in that location and the NEAS Heritage Advisor contacted for advice.</p> <p>If any archaeological finds are made: The contractor shall stop work; The artefact will be left in-situ; The NEAS Archaeologist shall be informed of the find immediately.</p>	Contractor		Project Manager to liaise with Environment Agency Project Manager and /or NEAS Heritage Advisor	
B6-2	Ensure reporting procedures for any potential archaeological / heritage finds are in place.	Provide 'Nominated Contact' to whom site staff report potential finds.	Contractor.		In the event of any potential finds being discovered, the contractors should contact Environment Agency Project Manager.	
B6-3	Penwortham Old Ferry	It is possible that the ferry house foundations are still in situ in the Ribble river bank. An archaeological watching brief should be undertaken at the site of the Penwortham Old Ferry in accordance with Chartered Institute for Archaeologists (CIfA) <i>Standard and guidance for an archaeological watching brief (2020)</i> ".	Contractor		Awaiting confirmation from NEAS re this requirement.	
<b>B7 GROUND CONDITIONS</b>						
B7-1	Ensure excavated/ disturbed spoil is dealt with correctly.	<p>Create segregated stockpiles.</p> <p>Carry out chemical testing/ analysis.</p>	Contractor			

## Preston and South Ribble Flood Risk Management Scheme: Areas 1 & 2, Environmental Action Plan

B7-2	Ensure excavated/ disturbed spoil is dealt with correctly and opportunities for reuse explored.	Prepare Method Statement for appropriate remediation/ disposal/ re-use measures (if required).  Topsoil handling to be in accordance with BS3882:2015  Agree Method Statement with Environment Agency.	Contractor			
B7-3	Ensure no long-term impact of contaminated land on people, structures and vegetation.	Comply with agreed risk assessment and remediation measures/ disposal/ re-use (if required).	Contractor			
<b>B8 TRAFFIC &amp; TRANSPORT</b>						
B8-1	To minimise disruption to the local road network.	Implement any mitigation measures requested by Lancashire County Council Highways. Keep local community and Highways informed of any change to programme.	Contractor			
<b>Post-construction</b>						
<b>C1 LAND USE AND RECREATION</b>						
C1-1	To reinstate access/use across the area.	Ensure all working area demarcation fencing is removed, the site is reinstated to satisfaction of the landowner(s) and a post-works condition survey is completed (including photos) of site compound and works areas and any access routes.	Contractor			
<b>C2 HUMAN POPULATION (N/A)</b>						
<b>C3 BIODIVERSITY, FLORA &amp; FAUNA</b>						

## Preston and South Ribble Flood Risk Management Scheme: Areas 1 & 2, Environmental Action Plan

C3-1	To protect and enhance key habitats for biodiversity gain to benefit plan and faunal species.	Implement habitat creation sites.  Reinstate all habitats on completion of the works. Deliver the measures to improve habitat, species, landscape and amenity as agreed, including reseeding the banks and replacing trees/scrub vegetation and wildflower grassland areas.	Contractor			
C3-2	To avoid establishment of non-native species in areas disturbed by the works.	Monitoring checks in the growing season following completion. Instigate eradication programme if any non-native species found.	Environment Agency	Invasive Non-Native Species Report  ENV0000009C-JAC-XX-00-RP-EN-0005		
<b>C4 LANDSCAPE &amp; VISUAL EFFECTS</b>						
C4-1	To re-instate all working areas including compound locations and soil storage locations to pre-construction or better condition.	Secure landowner approvals prior to handover.	Contractor / Environment Agency			
C4.2	Mitigate and enhance landscape following completion of construction.	Implement all mitigation and enhancements items as agreed with Preston and South Ribble Greenspaces Teams.	Contractor / Environment Agency	Landscape Masterplans ENV0000009C-JAC-ZZ-ZZ-DR-L-0002 to ENV0000009C-JAC-ZZ-DR-L-0009  South Ribble Sketch of proposed habitat creation ENV0000009C-JAC-ZZ-42X-DR-L-0001	Landscape Detailed design plans  ENV0000009C-JAC-ZZ--DR-L-0013 to ENV0000009C-JAC-ZZ--DR-L-0030  Detailed Plan for Ribble Sidings ENV0000009C-JAC-ZZ-42C-DR-L-0001	
C4.3	Remedial tree works.	If accidental damage is caused to trees or vegetation that requires remedial pruning / tree works, Project Manager to be advised. Tree works only to be undertaken by a suitably qualified arboricultural contractor.	Contractor	Report any accidental damage immediately to the EA PM or NEAS PM and report incidents as required		

## Preston and South Ribble Flood Risk Management Scheme: Areas 1 & 2, Environmental Action Plan

C4.4	Maintain embankments in perpetuity.	Cut grass 1 p.a., or as otherwise instructed by the Asset Engineer.	Environment Agency			
C4.5	Maintain landscape mitigation and enhancement elements.	Maintain landscape mitigation and enhancement planting elements for 5 year establishment period.	Environment Agency	Habitat Management Plan to be completed		
C5 WATER ENVIRONMENT (N/A)						
C5.1	To monitor impact of flooding.	Monitoring of actual extent of flooding will be carried out to check model findings.	Environment Agency			
C6 HISTORIC ENVIRONMENT						
C6-1	Document any archaeological findings.	Report will be prepared on the results of any archaeological mitigation carried out during construction.	Contractor			
C7 GROUND CONDITIONS (N/A)						
C8 NOISE & VIBRATION (N/A)						
C9 TRAFFIC & TRANSPORT (N/A)						

## Environmental audit record

<b>Project</b>	Preston and South Ribble Areas 1 and 2 FRMS	<b>Project ref.:</b>	ENV0000009C
<b>Project Manager:</b>	Alison Roberts	<b>NEAS EPM:</b>	Connor McIlwrath
<b>Location</b>	River Ribble, Preston, Lancashire	<b>Grid reference</b>	Centred on SD530282

### Site Visit Audit Details

<b>Visit During/Post Construction:</b>		<b>Date of Visit:</b>		<b>Time of Visit:</b>	
<b>Audit Officer:</b>		<b>Photos taken (y/n):</b>		<b>Referenced to Pre-Photos(y/n):</b>	

Does the Site Supervisor have an up to date copy of the EAP?      Yes / No

### General comments