

APPENDIX C - TETRA TECH RISK ASSESSMENTS & DYNAMIC RISK ASSESSMENT

- ☐ Tetra Tech Group Activity Risk Assessment
- ☐ Tetra Tech Dynamic Risk Assessment

Method Statement

PROJECT/BACKGROUND INFORMATION:		
Project Number:	784-B048567	
Project Name:	Newbridge GI	
Location of Activity/Site Address:	Western River Bed	
Project Description:	Geophysical Survey	
Date of Activity/Task:	TBC by Marine License	
Start and Finish Times:	08:00 to 17:00	
Project Manager/Supervisor of Activity/Task	PM: Nicholas Bool SS: James Craddock	
Document Version:	1.0	
Document Location:	A:\784-B048567_Newbridge_GI\30 SSHE\32 H and S\App C - TT RAMS	
Risks (Taken from the Project Specific Risk Assessment): <i>Risks and Controls measures here are determined in the Risk Assessment.</i>		
Risk and to Whom:	Control Measure(s):	Add additional detail below?
Environmental Constraints	Minimal disturbance to riverbed by geophones.	
Driving to site	Drivers should take breaks before and during journey to work to alleviate fatigue. If a driver feels tired during a journey they should pull over at the nearest safe location for a rest before continuing the journey. Drivers should not operate under the influence of drugs or alcohol. Drivers should respect other road users at all times.	
Poor manual handling resulting in Injury	All equipment to be set out by Atlas Geophysical in line with their RAMS	See Atlas Geophysical RAMS
Exposure to contaminated water, sediments or soils.	If potentially grossly contaminated material is identified by the Tetra Tech engineer during works operation will be stopped and a RED site operation will take effect with requirement for jet washing of equipment in suitable wash down area and provision of further PPE including RPE equipment and Tyvek suits.	
Slips, trips and falls.	Care to be taken when traversing steps down to boat set down area and riverbed. Algae to be cleared from set down area by shovel scrape ahead of WS access.	
Drowning	Works to be undertaken at low tide and under low flow, water no more than knee height. Atlas geophysical operatives and TT Engineer to wear lifejackets when working in and near the river channel. TT Engineer in attendance to have lifebuoy available and to hold guideline to workers in the channel.	
Details of any Additional Control Measure(s)/Details:		
<i>This section is to be used to capture any ADDITIONAL measures/details not already covered in the above. Always ensure to make it clear which risk they relate to.</i>		

Summary of Key Issues/Considerations			
Provide additional details where appropriate.			
Previous RAMS to consider?	No	Urban or rural site?	Urban
Other Contractor Activity?	No.	Working at height?	Yes working in river channel
Interface with Public?	Unlikely	Asbestos consideration?	Not anticipated
Night-time Working?	No	Confined space working?	No
Working Near Water?	Yes	[Additional Issue]	No

Method Statement/Sequence of Activity/Task:

Access Arrangements

- Access to the geophysical survey line will be via a small set of concrete steps onto a concrete set down area.
- Set down area to be cleared of algae prior to accessing with geophysical equipment.
- WS rig to be pushed by hand onto WS locations at low tide.
- River channel to only be accessed at low tide and under low flow conditions where water is below knee height.
- Operatives to wear lifejackets when working in or near the river channel.
- TT Engineer to be in attendance with life buoy and guidelines.

Geophysical Survey

- Geophysical survey in channel to be undertaken in line with Atlas Geophysical RAMS.
-

Site Map (If Applicable):

Including parking and site access details/access routes/activity locations.



Details of any Permits/Licences:

Tetra Tech Permit to Dig.

Personnel and Contact Numbers:

TT PM: Nicholas Bool, 07917 735669

TT Supervisor: James Craddock, 07966 534346

Details of Equipment, Materials and Plant

Please list each item and include responsible persons.

Item	Responsible Person(s)	Item	Responsible Person(s)
Geophysical Survey Equipment Geophones, reaction plate, hammer and Computation Units.	Atlas Geophysical		
Vans/4x4	Atlas Geophysical, James Craddock		

Details of Mandatory Personal Protective Equipment (PPE):

Please tick all checkboxes that apply.

					
Eye protection	Face Shield	Foot Protection	Hand Protection	Head Protection	Hearing Protection
☐	☐	☒	☒	☒	☐
					
Protective clothing	Respiratory protection	Safety Harness	High visibility clothing	Face mask	Life jacket
☐	☐	☐	☒	☐	☒

Other required PPE / Specific details of PPE:

Details of any Security Arrangements:

Please include details of security requirements. e.g. Codes, Security clearance, Escort details.

Attend ABP induction prior to works commencing.

Welfare Arrangements:

Nearest onsite/public welfare facilities.

Groundhog unit will be available for TT engineer and Operatives on Riverside Road outside ABP gate.

Nearest Hospital:

Morrison Hospital, Heol Maes Eglwys, Morrison, Swansea, SA6 6NL

Tel: 01792 702222

Buddy Details (if applicable):

Buddy Name and Contact Details:	Name: Nicholas Bool Mobile: 07917 735669 Signature to confirm aware:	Check-ins: <i>Check-ins should be conducted as follow:</i>	Arriving on site When leaving the site for home
Lone Working Arrangements: NA			
Emergency Contact Details/Emergency Arrangements:			
Site/Client Contact: Elinor Meloy NRW, 07817 026477 TT Contact #1: Nicholas Bool 07917 735669 TT Contact #2: Chris Pugh 07711 086236 SSHEQ Out of Hours Emergency Support Line: 07920 703 197 SSHEQ Near-Miss Reporting Form: SSHEQ (sharepoint.com)			
Quality Control and Method Statement Approvals:			
Prepared by:	Nicholas Bool	Signed & Dated:	 10/10/23
Approved by:	Chris Pugh	Signed & Dated:	 10/10/23
By signing below, I confirm that: - I have read, understood, and had the opportunity to ask questions regarding the risks and method statement associated with this activity/task - I will follow all the measures detailed above to control and mitigate the risks associated with this activity/task - In the event of any deviations from this Method Statement, I understand I must STOP, reassess the activity/task and escalate to the Project Manager/Site Supervisor - I acknowledge that failure to do so could compromise my own health and safety and that of others which could result in action being taken			

Name:	Date:	Signature:

Doc Ref Number:	SSHEQ-H&S-008b	Version:	2
Owner:	Group SSHEQ	Department:	SSHEQ
Date of last review:	April 2022	Date of next review:	April 2024

Geophysical Survey

Description (Project Title)	Newbridge GI	Project Number	784-B048567	Issue date	10/10/23
Initially Prepared by	Nicholas Bool	Specific assessment	Cable Percussive Drilling	Approved by	Chris Pugh
Address/Site Location	Riverside Road, Port Talbot, SA6 6NL	Tel:	07817 026477	E-mail	elinor.meloy@cyfoethnaturiolcymru.gov.uk
Scope of Activity	Geophysical Survey				

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
1.	Environmental Constraints	2	2	4	Minimal disturbance to riverbed by geophones.	1	2	2	
2.	Driving to site	2	5	10	Drivers should take breaks before and during journey to work to alleviate fatigue. If a	1	5	5	

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
					driver feels tired during a journey they should pull over at the nearest safe location for a rest before continuing the journey. Drivers should not operate under the influence of drugs or alcohol. Drivers should respect other road users at all times.				
2.	Poor manual handling resulting in Injury	3	3	9	All equipment to be set out by Atlas Geophysical in line with their RAMS	1	3	3	
3.	Exposure to contaminated water, sediments or soils.	1	3	3	If potentially grossly contaminated material is identified by the Tetra Tech engineer during works digging will be stopped and a RED site operation will take effect with	1	1	1	

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
					requirement for jet washing of equipment in suitable wash down area and provision of further PPE including RPE equipment and Tyvek suits.				
4.	Slips, trips and falls.	3	3	9	Care to be taken when traversing steps down to boat set down area and riverbed. Algae to be cleared from set down area by shovel scrape ahead of WS access.	1	3	3	
5.	Drowning	2	4	8	Works to be undertaken at low tide and under low flow, water no more than knee height. Atlas geophysical operatives and TT Engineer to wear lifejackets when working in and near the river channel. TT	1	4	4	

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
					Engineer in attendance to have lifebuoy available and to hold guideline to workers in the channel.				

By signing below, I confirm that:

- I have read, understood, and had the opportunity to ask questions regarding the risks associated with this activity/task
- I will follow all the measures detailed above to control and mitigate the risks associated with this activity/task
- In the event of any deviations from this Risk Assessment and any associated Method Statement, I understand I must **STOP**, reassess the activity/task and escalate to the Project Manager/Director/Site Supervisor
- I acknowledge that failure to do so could compromise my own security, safety, health or wellbeing and that of others which could result in action being taken

Print Name:	Date:	Signature:
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		Likelihood of exposure to hazard					Consider ERIC <u>ELIMINATE</u> the hazard completely <u>REDUCE</u> the risk to a more acceptable level <u>INFORM</u> workforce/others <u>CONTROL</u> the residual risk Also consider the 'General Principles of Prevention' (See CDM ACoP: Appendix 7)
		Likely (5)	Probable (4)	Possible (3)	Remote (2)	Improbable (1)	
Severity of foreseeable consequences		Exposure to the hazard will occur frequently during the activity (more than 10 events per year)	Exposure to the hazard can be expected to occur during the activity (2 to 10 events per year)	Exposure to the hazard will occur occasionally during the activity (1 event every 1 to 10 years)	Exposure to the hazard will seldom occur during the activity (1 event every 10-100 years)	Exposure to the hazard is highly unlikely during the activity (1 event every 100+ years)	
Catastrophic (5)	Accident involving one or more fatalities	25	20	15	10	5	
Major (4)	Major accident under RIDDOR, or permanent ill health reportable	20	16	12	8	4	
Serious (3)	Accident necessitating time off work, or chronic or acute	15	12	9	6	3	
Minor Injury (2)	Accident not necessitating time off work, or minor health	10	8	6	4	2	
Incident (1)	Near miss, no injury sustained, or ill health	5	4	3	2	1	

Note: If the risk level after control measures remains in the Red zone (a residual score of between 20 and 25), then the activity should not proceed until the risk(s) are escalated through Line Management and further controls are identified, agreed and implemented.

If after escalation the risk(s) cannot be reduced further, it may be decided by the Project team that the activity/project does not commence.

Doc ref number:	SSHEQ-H&S-002f	Version:	4
Owner:	Group SSHEQ	Department:	SSHEQ
Date of last review:	November 2022	Date of next review:	November 2024

Sediment and Surface Water Sampling



Description (Project Title)	Newbridge GI	Project Number	784-B048567	Issue date	10/10/23
Initially Prepared by	Nicholas Bool	Specific assessment	Sediment Sampling and Surface Water Sampling	Approved by	Chris Pugh
Address/Site Location	Riverside Road, Port Talbot, SA6 6NL	Tel:	07817 026477	E-mail	elinor.meloy@cyfoethnaturiolcymru.gov.uk
Scope of Activity	4no. HHTP sediment sampling locations 4no. Surface water sampling locations.				

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
1.	Environmental Constraints	3	3	9	Works to be undertaken in line with Marine License. No risks from hand tools or sampling equipment. Van Veen Grab to be used to take the HHTP03 sample from	1	2	2	

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
					deep part of the channel using a throw rope.				
2.	Driving to site	2	5	10	Drivers should take breaks before and during journey to work to alleviate fatigue. If a driver feels tired during a journey they should pull over at the nearest safe location for a rest before continuing the journey. Drivers should not operate under the influence of drugs or alcohol. Drivers should respect other road users at all times.	1	5	5	
3.	Poor manual handling resulting in Injury	3	3	9	Engineer should be comfortable with any load from the hand tools and sampling equipment and employ the correct lifting technique	1	3	3	

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
					outlined in the Tetra Tech COPS.				
4.	Exposure to contaminated water, sediments or soils.	1	3	3	If potentially grossly contaminated material is identified by the Tetra Tech engineer during works digging will be stopped and a RED site operation will take effect with requirement for jet washing of equipment in suitable wash down area and provision of further PPE including RPE equipment and Tyvek suits.	1	1	1	
5.	Exposure to asbestos containing materials (ACM)	2	5	10	If possible ACMs are encountered, the asbestos risk assessment procedure will be followed, as included in Appendix D. Namely,	1	5	5	

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
					additional PPE may be required, namely Tyvek suits and RPE equipment. Damping down of soil will be undertaken as required to limit potential for release of fibres				
6.	Slips, trips and falls.	3	3	9	Care to be taken when traversing riverbank and steps down to the river channel. Algae to be removed from concrete set down area prior to access.	1	3	3	
7.	Drowning	2	5	10	Works to be undertaken at low tide. TT Engineer and second TT Engineer to wear lifejackets when working in the river channel. TT Engineer in	1	5	5	

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
					attendance to have lifebuoy available.				

By signing below, I confirm that:

- I have read, understood, and had the opportunity to ask questions regarding the risks associated with this activity/task
- I will follow all the measures detailed above to control and mitigate the risks associated with this activity/task
- In the event of any deviations from this Risk Assessment and any associated Method Statement, I understand I must **STOP**, reassess the activity/task and escalate to the Project Manager/Director/Site Supervisor
- I acknowledge that failure to do so could compromise my own security, safety, health or wellbeing and that of others which could result in action being taken

Print Name:	Date:	Signature:
--------------------	--------------	-------------------

		Likelihood of exposure to hazard					Consider ERIC <u>ELIMINATE</u> the hazard completely <u>REDUCE</u> the risk to a more acceptable level <u>INFORM</u> workforce/others <u>CONTROL</u> the residual risk Also consider the 'General Principles of Prevention' (See CDM ACoP: Appendix 7)
		Likely (5)	Probable (4)	Possible (3)	Remote (2)	Improbable (1)	
Severity of foreseeable consequences		Exposure to the hazard will occur frequently during the activity (more than 10 events per year)	Exposure to the hazard can be expected to occur during the activity (2 to 10 events per year)	Exposure to the hazard will occur occasionally during the activity (1 event every 1 to 10 years)	Exposure to the hazard will seldom occur during the activity (1 event every 10-100 years)	Exposure to the hazard is highly unlikely during the activity (1 event every 100+ years)	
Catastrophic (5)	Accident involving one or more fatalities	25	20	15	10	5	
Major (4)	Major accident under RIDDOR, or permanent ill health reportable	20	16	12	8	4	
Serious (3)	Accident necessitating time off work, or chronic or acute	15	12	9	6	3	
Minor Injury (2)	Accident not necessitating time off work, or minor health	10	8	6	4	2	
Incident (1)	Near miss, no injury sustained, or ill health	5	4	3	2	1	

Note: If the risk level after control measures remains in the Red zone (a residual score of between 20 and 25), then the activity should not proceed until the risk(s) are escalated through Line Management and further controls are identified, agreed and implemented.

If after escalation the risk(s) cannot be reduced further, it may be decided by the Project team that the activity/project does not commence.

Doc ref number:	SSHEQ-H&S-002f	Version:	4
Owner:	Group SSHEQ	Department:	SSHEQ
Date of last review:	November 2022	Date of next review:	November 2024

Method Statement

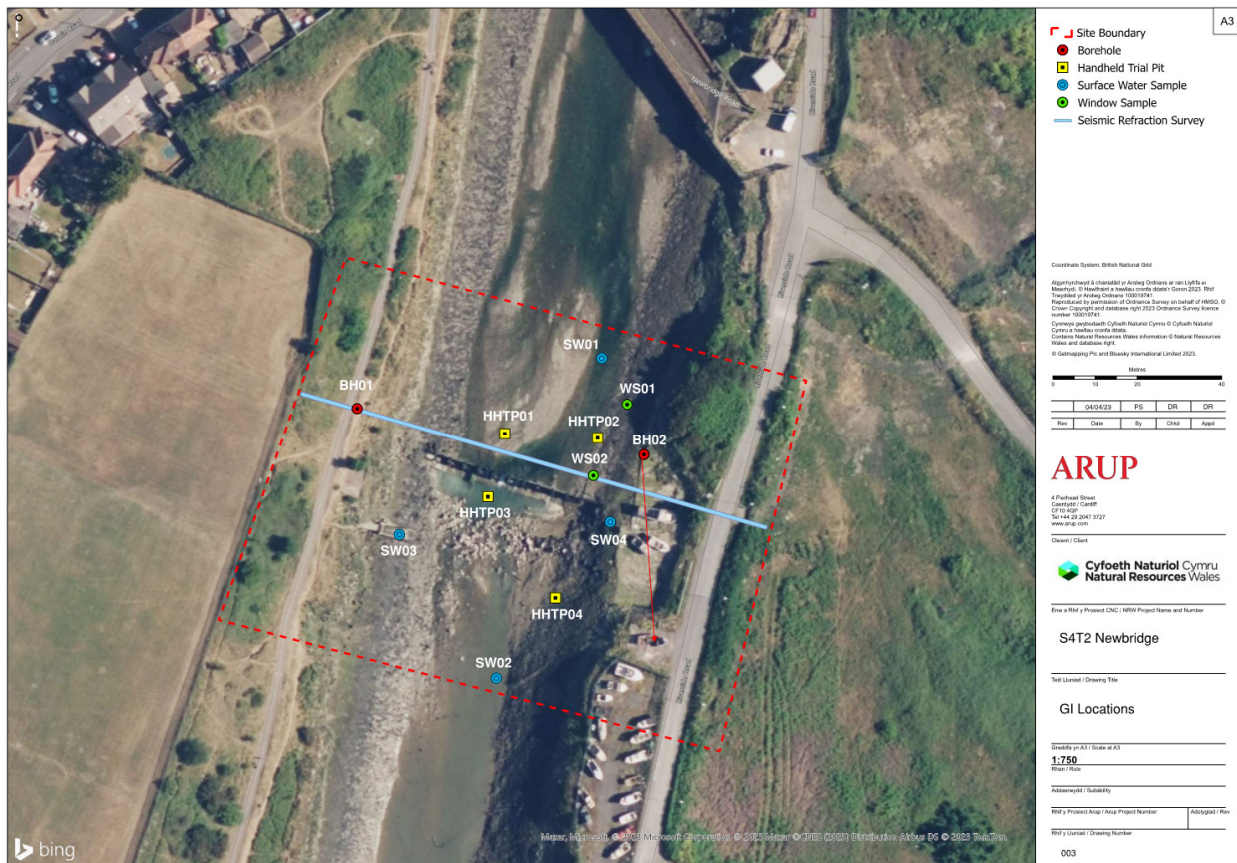
PROJECT/BACKGROUND INFORMATION:		
Project Number:	784-B048567	
Project Name:	Newbridge GI	
Location of Activity/Site Address:	Western River Bed	
Project Description:	4no. HHTP sediment sampling locations 4no. Surface water sampling locations.	
Date of Activity/Task:	TBC by Marine License	
Start and Finish Times:	08:00 to 17:00	
Project Manager/Supervisor of Activity/Task	PM: Nicholas Bool SS: James Craddock	
Document Version:	1.0	
Document Location:	A:\784-B048567_Newbridge_GI\30 SSHE\32 H and S\App C - TT RAMS	
Risks (Taken from the Project Specific Risk Assessment): <i>Risks and Controls measures here are determined in the Risk Assessment.</i>		
Risk and to Whom:	Control Measure(s):	Add additional detail below?
Environmental Constraints	Works to be undertaken in line with Marine License. No risks from hand tools or sampling equipment	Van Veen Grab to be used to take the HHTP03 sample from deep part of the channel using a throw rope.
Driving to site	Drivers should take breaks before and during journey to work to alleviate fatigue. If a driver feels tired during a journey they should pull over at the nearest safe location for a rest before continuing the journey. Drivers should not operate under the influence of drugs or alcohol. Drivers should respect other road users at all times.	
Poor manual handling resulting in Injury	Engineer should be comfortable with any load from the hand tools and sampling equipment and employ the correct lifting technique outlined in the Tetra Tech COPS.	
Exposure to contaminated water, sediments or soils.	If potentially grossly contaminated material is identified by the Tetra Tech engineer during works digging will be stopped and a RED site operation will take effect with requirement for jet washing of equipment in suitable wash down area and provision of further PPE including RPE equipment and Tyvek suits.	
Exposure to asbestos containing materials (ACM)	If possible ACMs are encountered, the asbestos risk assessment procedure will be followed, as included in Appendix D. Namely, additional PPE may be required, namely Tyvek suits and RPE equipment. Damping down of soil will be undertaken as required to limit potential for release of fibres	
Slips, trips and falls.	Care to be taken when traversing river bank and steps down to the river channel. Algae to be removed from concrete set down area prior to access.	

Drowning	Works to be undertaken at low tide. TT Engineer and second TT Engineer to wear lifejackets when working in the river channel. Second TT Engineer in attendance to have lifebuoy available.	
Details of any Additional Control Measure(s)/Details: <i>This section is to be used to capture any ADDITIONAL measures/details not already covered in the above. Always ensure to make it clear which risk they relate to.</i>		
Summary of Key Issues/Considerations <i>Provide additional details where appropriate.</i>		
Previous RAMS to consider?	No	Urban or rural site? Urban
Other Contractor Activity?	No.	Working at height? Yes working on riverbank.
Interface with Public?	Possible boat users and ABP Workers	Asbestos consideration? Not anticipated
Night-time Working?	No	Confined space working? No
Working Near Water?	Yes	[Additional Issue] No
Method Statement/Sequence of Activity/Task:		
Access Arrangements - Access to the HHTP and SW locations will be via a small set of concrete steps onto a concrete set down area. - HHTP01 and SW01 to be accessed using wellingtons at low tide and during low flow conditions; - SW03 to be accessed from the South Wales Coastal Path; - Set down area to be cleared of algae prior to accessing with the WS rig; - WS rig to be pushed by hand onto WS locations at low tide.		
Hand Pitting - Prior to excavation Permit to Dig will be issued. - Hand pits will be excavated at each borehole location to 1.20m bgl. - Sub sampling and in-situ testing to be undertaken from the spoil material only.		
Windowless Sample Drilling - Window Sample rig to be operated in line with SWGT RAMS. - TT Engineer to stay clear of windowless sample rig when in operation.		
Reinstatement		

- HHTP locations to have discreet sample taken from river bed.
- Surface water samples do not require reinstatement.

Site Map (If Applicable):

Including parking and site access details/access routes/activity locations.



Details of any Permits/Licences:

Tetra Tech Permit to Dig.

Personnel and Contact Numbers:

TT PM: Nicholas Bool, 07917 735669

TT Supervisor: James Craddock, 07966 534346

Details of Equipment, Materials and Plant

Please list each item and include responsible persons.

Item	Responsible Person(s)	Item	Responsible Person(s)
CAT & Genny	James Craddock	Hand Vane	James Craddock
Van	James Craddock		

Details of Mandatory Personal Protective Equipment (PPE):

Please tick all checkboxes that apply.

 Eye protection ☐	 Face Shield ☐	 Foot Protection ☒	 Hand Protection ☒	 Head Protection ☒	 Hearing Protection ☐
 Protective clothing ☐	 Respiratory protection ☐	 Safety Harness ☐	 High visibility clothing ☒	 Face mask ☐	 Life jacket ☒

Other required PPE / Specific details of PPE:

Details of any Security Arrangements:

Please include details of security requirements. e.g. Codes, Security clearance, Escort details.

Attend ABP induction prior to works commencing.

Welfare Arrangements:

Nearest onsite/public welfare facilities.

Groundhog unit will be available for TT engineer and Operatives on Riverside Road outside ABP gate.

Nearest Hospital:

Morrison Hospital, Heol Maes Eglwys, Morrison, Swansea, SA6 6NL

Tel: 01792 702222

Buddy Details (if applicable):

Buddy Name and Contact Details:	Name: Nicholas Bool Mobile: 07917 735669 Signature to confirm aware:	Check-ins: <i>Check-ins should be conducted as follow:</i>	Arriving on site When leaving the site for home
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Lone Working Arrangements: NA			
Emergency Contact Details/Emergency Arrangements:			
Site/Client Contact: Elinor Meloy NRW, 07817 026477 TT Contact #1: Nicholas Bool 07917 735669 TT Contact #2: Chris Pugh 07711 086236 SSHEQ Out of Hours Emergency Support Line: 07920 703 197 SSHEQ Near-Miss Reporting Form: SSHEQ (sharepoint.com)			
Quality Control and Method Statement Approvals:			
Prepared by:	Nicholas Bool	Signed & Dated:	 10/10/23
Approved by:	Chris Pugh	Signed & Dated:	 10/10/23
By signing below, I confirm that: - I have read, understood, and had the opportunity to ask questions regarding the risks and method statement associated with this activity/task - I will follow all the measures detailed above to control and mitigate the risks associated with this activity/task - In the event of any deviations from this Method Statement, I understand I must STOP, reassess the activity/task and escalate to the Project Manager/Site Supervisor - I acknowledge that failure to do so could compromise my own health and safety and that of others which could result in action being taken			
Name:	Date:	Signature:	

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Owner:	Group SSHEQ	Department:	SSHEQ
Date of last review:	April 2022	Date of next review:	April 2024

Method Statement

PROJECT/BACKGROUND INFORMATION:		
Project Number:	784-B048567	
Project Name:	Newbridge GI	
Location of Activity/Site Address:	Western River Bed	
Project Description:	2no. Windowless Sample Boreholes	
Date of Activity/Task:	TBC by Marine License	
Start and Finish Times:	08:00 to 17:00	
Project Manager/Supervisor of Activity/Task	PM: Nicholas Bool SS: James Craddock	
Document Version:	1.0	
Document Location:	A:\784-B048567_Newbridge_GI\30 SSHE\32 H and S\App C - TT RAMS	
Risks (Taken from the Project Specific Risk Assessment): <i>Risks and Controls measures here are determined in the Risk Assessment.</i>		
Risk and to Whom:	Control Measure(s):	Add additional detail below?
Risk of member of the public or site personnel being struck by equipment whilst it is in transit.	Windowless sampler is wheeled and will be pushed by hand by two operatives from the support vehicle with TT Banksman in attendance.	Sampler will need to be wheeled down small set of steps onto concrete set down area below road level.
Environmental Constraints	Windowless Sample generator to be left at road level on drip tray away from river bed.	
Driving to site	Drivers should take breaks before and during journey to work to alleviate fatigue. If a driver feels tired during a journey they should pull over at the nearest safe location for a rest before continuing the journey. Drivers should not operate under the influence of drugs or alcohol. Drivers should respect other road users at all times.	
Striking of known or unknown utilities/services.	Pre-start assessment of exploratory hole locations by TT Supervisor. GPR and CAT & Genny location of the site by Midland Survey.	
Environmental risk (fuel spillage whilst refueling)	Refueling not to be undertaken on site.	
Poor manual handling resulting in Injury	Large bulks will be broken down into two separate bulks to ensure they are below the 20kg. Engineer should be comfortable with any load and employ the correct lifting technique outlined in the Tetra Tech COPS.	
Cut Injuries	ReAkta safety blade to be used to split liners.	
Exposure to contaminated water, sediments or soils.	If potentially grossly contaminated material is identified by the Tetra Tech engineer during works digging will be stopped and a RED site operation will take effect with requirement for jet washing of equipment in suitable wash down area and provision of further PPE including RPE equipment and Tyvek suits.	

Exposure to asbestos containing materials (ACM)	If possible ACMs are encountered, the asbestos risk assessment procedure will be followed, as included in Appendix D. Namely, additional PPE may be required, namely Tyvek suits and RPE equipment. Damping down of soil will be undertaken as required to limit potential for release of fibres	
Slips, trips and falls.	Care to be taken when traversing steps down to boat set down area. TT Supervisor and second man below and first man above to guide windowless sampler. Algae to be cleared from set down area by shovel scrape ahead of WS access.	
Moving parts of machinery	TT Engineer not to approach windowless sampler rig while in operation.	See SWGT RAMS for additional detail on drilling operations
Drowning	Works to be undertaken at low tide. Windowless sampler operatives and TT Engineer to wear lifejackets when working in the river channel. TT Engineer in attendance to have lifebuoy available.	

Details of any Additional Control Measure(s)/Details:

*This section is to be used to capture any **ADDITIONAL** measures/details not already covered in the above. Always ensure to make it clear which risk they relate to.*

Summary of Key Issues/Considerations

Provide additional details where appropriate.

Previous RAMS to consider?	No	Urban or rural site?	Urban
Other Contractor Activity?	No.	Working at height?	Yes working on riverbank.
Interface with Public?	Possible boat users and ABP Workers	Asbestos consideration?	Not anticipated
Night-time Working?	No	Confined space working?	No
Working Near Water?	Yes	[Additional Issue]	No

Method Statement/Sequence of Activity/Task:

Access Arrangements

- Access to the WS locations will be via a small set of concrete steps onto a concrete set down area.
- Set down area to be cleared of algae prior to accessing with the WS rig.
- WS rig to be pushed by hand onto WS locations at low tide.

Buried Service Clearance

- TT Engineer and Midland Survey Ltd to assess the location of the of service scaring and coverers and scan using GPR CAT & Signal Generator and agree an offset for exploratory hole locations required nearby.

- All exploratory holes to be scanned using GPR, CAT and Genny and marked up prior to excavation.

Hand Pitting

- Prior to excavation Permit to Dig will be issued.
- Hand pits will be excavated at each borehole location to 1.20m bgl.
- Sub sampling and in-situ testing to be undertaken from the spoil material only.

Windowless Sample Drilling

- Window Sample rig to be operated in line with SWGT RAMS.
- TT Engineer to stay clear of windowless sample rig when in operation.

Reinstatement

- Exploratory windowless sample positions will be backfilled with bentonite pellets.

Site Map (If Applicable):

Including parking and site access details/access routes/activity locations.



Details of any Permits/Licences:

Tetra Tech Permit to Dig.

Personnel and Contact Numbers:

TT PM: Nicholas Bool, 07917 735669

TT Supervisor: James Craddock, 07966 534346

Details of Equipment, Materials and Plant

Please list each item and include responsible persons.

Item	Responsible Person(s)	Item	Responsible Person(s)
Ground Penetrating Radar	Midland Survey	CAT & Genny	Midland Survey
CAT & Genny	James Craddock	Hand Vane	James Craddock
Vans/4x4	Midland Survey, SWGT, James Craddock	Wheeled Windowless Sampler	SWGT

Details of Mandatory Personal Protective Equipment (PPE):

Please tick all checkboxes that apply.

					
Eye protection	Face Shield	Foot Protection	Hand Protection	Head Protection	Hearing Protection
☐	☐	☒	☒	☒	☐
					
Protective clothing	Respiratory protection	Safety Harness	High visibility clothing	Face mask	Life jacket
☐	☐	☐	☒	☐	☒

Other required PPE / Specific details of PPE:
Details of any Security Arrangements:

Please include details of security requirements. e.g. Codes, Security clearance, Escort details.

Attend ABP induction prior to works commencing.

Welfare Arrangements:

Nearest onsite/public welfare facilities.

Groundhog unit will be available for TT engineer and Operatives on Riverside Road outside ABP gate.

Nearest Hospital:

Morrison Hospital, Heol Maes Eglwys, Morrison, Swansea, SA6 6NL

Tel: 01792 702222

Buddy Details (if applicable):

Buddy Name and Contact Details:	Name: Nicholas Bool Mobile: 07917 735669 Signature to confirm aware:	Check-ins: <i>Check-ins should be conducted as follow:</i>	Arriving on site When leaving the site for home
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Lone Working Arrangements:

NA

Emergency Contact Details/Emergency Arrangements:

Site/Client Contact: Elinor Meloy NRW, 07817 026477

TT Contact #1: Nicholas Bool 07917 735669

TT Contact #2: Chris Pugh 07711 086236

SSHEQ Out of Hours Emergency Support Line: 07920 703 197

SSHEQ Near-Miss Reporting Form: [SSHEQ \(sharepoint.com\)](#)

Quality Control and Method Statement Approvals:

Prepared by:	Nicholas Bool	Signed & Dated:	 10/10/23
Approved by:	Chris Pugh	Signed & Dated:	 10/10/23

By signing below, I confirm that:

- I have read, understood, and had the opportunity to ask questions regarding the risks and method statement associated with this activity/task
- I will follow all the measures detailed above to control and mitigate the risks associated with this activity/task

- In the event of any deviations from this Method Statement, I understand I must STOP, reassess the activity/task and escalate to the Project Manager/Site Supervisor
- I acknowledge that failure to do so could compromise my own health and safety and that of others which could result in action being taken

Name:	Date:	Signature:

Doc Ref Number: SSHEQ-H&S-008b	Version: 2
Owner: Group SSHEQ	Department: SSHEQ
Date of last review: April 2022	Date of next review: April 2024

Windowless Sample Boreholes

Description (Project Title)	Newbridge GI	Project Number	784-B048567	Issue date	10/10/23
Initially Prepared by	Nicholas Bool	Specific assessment	Windowless Sample Drilling	Approved by	Chris Pugh
Address/Site Location	Riverside Road, Port Talbot, SA6 6NL	Tel:	07817 026477	E-mail	elinor.meloy@cyfoethnaturiolcymru.gov.uk
Scope of Activity	2 No. Windowless Sample Boreholes				

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
1.	Risk of member of the public or site personnel being struck by equipment whilst it is in transit.	3	3	9	Windowless sampler is wheeled and will be pushed by hand by two operatives from the support vehicle with TT Banksman in attendance.	1	2	2	Review on Arrival
2.	Driving to site	2	5	10	Drivers should take breaks before and during journey to	1	5	5	

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
					work to alleviate fatigue. If a driver feels tired during a journey they should pull over at the nearest safe location for a rest before continuing the journey. Drivers should not operate under the influence of drugs or alcohol. Drivers should respect other road users at all times.				
3.	Striking of known or unknown utilities/services.	3	5	15	Pre-start assessment of exploratory hole locations by TT Supervisor. GPR and CAT & Genny location of the site by Midland Survey.	1	5	5	
4.	Environmental risk (fuel spillage whilst refuelling)	3	2	6	Refueling not to be undertaken on site.	1	2	2	

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
5.	Poor manual handling resulting in Injury	3	3	9	Large bulks will be broken down into two separate bulks to ensure they are below the 20kg. Engineer should be comfortable with any load and employ the correct lifting technique outlined in the Tetra Tech COPS.	1	3	3	
6.	Cut Injuries	3	4	12	ReAkta safety blade to be used to split liners.	1	4	4	
7.	Exposure to contaminated water, sediments or soils.	1	3	3	If potentially grossly contaminated material is identified by the Tetra Tech engineer during works digging will be stopped and a RED site operation will take effect with requirement for jet washing of equipment in suitable wash	1	1	1	

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
					down area and provision of further PPE including RPE equipment and Tyvek suits.				
8.	Exposure to asbestos containing materials (ACM)	2	5	10	If possible ACMs are encountered, the asbestos risk assessment procedure will be followed, as included in Appendix D. Namely, additional PPE may be required, namely Tyvek suits and RPE equipment. Damping down of soil will be undertaken as required to limit potential for release of fibres	1	5	5	
9.	Slips, trips and falls.	3	3	9	Care to be taken when traversing steps down to boat set down area. TT Supervisor and second man below and	1	3	3	

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
					first man above to guide windowless sampler. Algae to be cleared from set down area by shovel scrape ahead of WS access.				
10.	Moving parts of machinery	2	4	8	TT Engineer not to approach windowless sampler rig while in operation.	1	4	4	
11.	Falls from Height	3	4	12	TT Engineer to stay away from embankment edges as far as is reasonably practicable. Apex crew to stay clear of riverbank edges as far as is reasonably practicable. HERAS fencing to act as physical barrier with riverbank edge.	1	4	4	

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
12.	Drowning	2	5	10	Works to be undertaken at low tide. Windowless sampler operatives and TT Engineer to wear lifejackets when working in the river channel. TT Engineer in attendance to have lifebuoy available.	1	5	5	

By signing below, I confirm that:

- I have read, understood, and had the opportunity to ask questions regarding the risks associated with this activity/task
- I will follow all the measures detailed above to control and mitigate the risks associated with this activity/task
- In the event of any deviations from this Risk Assessment and any associated Method Statement, I understand I must **STOP**, reassess the activity/task and escalate to the Project Manager/Director/Site Supervisor
- I acknowledge that failure to do so could compromise my own security, safety, health or wellbeing and that of others which could result in action being taken

Print Name:	Date:	Signature:

		Likelihood of exposure to hazard					Consider ERIC <u>ELIMINATE</u> the hazard completely <u>REDUCE</u> the risk to a more acceptable level <u>INFORM</u> workforce/others <u>CONTROL</u> the residual risk Also consider the 'General Principles of Prevention' (See CDM ACoP: Appendix 7)
		Likely (5)	Probable (4)	Possible (3)	Remote (2)	Improbable (1)	
Severity of foreseeable consequences		Exposure to the hazard will occur frequently during the activity (more than 10 events per year)	Exposure to the hazard can be expected to occur during the activity (2 to 10 events per year)	Exposure to the hazard will occur occasionally during the activity (1 event every 1 to 10 years)	Exposure to the hazard will seldom occur during the activity (1 event every 10-100 years)	Exposure to the hazard is highly unlikely during the activity (1 event every 100+ years)	
Catastrophic (5)	Accident involving one or more fatalities	25	20	15	10	5	
Major (4)	Major accident under RIDDOR, or permanent ill health reportable	20	16	12	8	4	
Serious (3)	Accident necessitating time off work, or chronic or acute	15	12	9	6	3	
Minor Injury (2)	Accident not necessitating time off work, or minor health	10	8	6	4	2	
Incident (1)	Near miss, no injury sustained, or ill health	5	4	3	2	1	

Note: If the risk level after control measures remains in the Red zone (a residual score of between 20 and 25), then the activity should not proceed until the risk(s) are escalated through Line Management and further controls are identified, agreed and implemented.

If after escalation the risk(s) cannot be reduced further, it may be decided by the Project team that the activity/project does not commence.

Doc ref number:	SSHEQ-H&S-002f	Version:	4
Owner:	Group SSHEQ	Department:	SSHEQ
Date of last review:	November 2022	Date of next review:	November 2024

Method Statement

PROJECT/BACKGROUND INFORMATION:		
Project Number:	784-B048567	
Project Name:	Newbridge GI	
Location of Activity/Site Address:	Eastern and Western Banks of the Afan River	
Project Description:	2no. Cable Percussive Boreholes	
Date of Activity/Task:	TBC by Marine License	
Start and Finish Times:	08:00 to 17:00	
Project Manager/Supervisor of Activity/Task	PM: Nicholas Bool SS: James Craddock	
Document Version:	1.0	
Document Location:	A:\784-B048567_Newbridge_GI\30 SSHE\32 H and S\App C - TT RAMS	
Risks (Taken from the Project Specific Risk Assessment): <i>Risks and Controls measures here are determined in the Risk Assessment.</i>		
Risk and to Whom:	Control Measure(s):	Add additional detail below?
Risk of member of the public or site personnel being struck by equipment whilst it is in transit.	Cable Percussive Rig to be tracked at walking pace to BH01 along the existing footpath on the western bank with suitably qualified TT banksman present at all times. Access to BH02 is from the highway. Cable percussive rig to be driven onto the location with the TT banksman in attendance.	BH01 - JCB 3CX to be used to remove boulder from South Wales Coastal Path entrance location off Darwinn Road
Driving to site	Drivers should take breaks before and during journey to work to alleviate fatigue. If a driver feels tired during a journey they should pull over at the nearest safe location for a rest before continuing the journey. Drivers should not operate under the influence of drugs or alcohol. Drivers should respect other road users at all times.	
Striking of known or unknown utilities/services.	Pre-start assessment of exploratory hole locations by TT Supervisor. GPR and CAT & Genny location of the site by Midland Survey.	
Environmental risk (fuel spillage whilst refueling)	Refueling of cable percussive rigs to be undertaken with the deployment of a drip tray and plant nappy below.	
Poor manual handling resulting in Injury	Large bulks will be broken down into two separate bulks to ensure they are below the 20kg. Engineer should be comfortable with any load and employ the correct lifting technique outlined in the Tetra Tech COPS.	
Exposure to contaminated water, sediments or soils.	If potentially grossly contaminated material is identified by the Tetra Tech engineer during works digging will be stopped and a RED site operation will take effect with requirement for jet washing of equipment in suitable wash down area and provision of further PPE including RPE equipment and Tyvek suits.	

Exposure to asbestos containing materials (ACM)	If possible ACMs are encountered, the asbestos risk assessment procedure will be followed, as included in Appendix D. Namely, additional PPE may be required, namely Tyvek suits and RPE equipment. Damping down of soil will be undertaken as required to limit potential for release of fibres	
Slips, trips and falls.	Care to be taken when traversing footpath verges. Care to be taken when accessing stockpile. TT Engineer to assess easiest access route prior to traversing.	
Moving parts of machinery	TT Engineer not to approach cable percussive rig while in operation. HERAS fence panels to be deployed around the drilling rig to prevent access to moving parts when in operation.	See Apex RAMS for additional detail on drilling operations
Falls from Height	TT Engineer to stay away from embankment edges as far as is reasonably practicable. Apex crew to stay clear of riverbank edges as far as is reasonably practicable. HERAS fencing to act as physical barrier with riverbank edge.	
Drowning	TT Engineer to stay away from embankment edges as far as is reasonably practicable. Apex crew to stay clear of riverbank edges as far as is reasonably practicable. HERAS fencing to act as physical barrier with riverbank edge.	

Details of any Additional Control Measure(s)/Details:

*This section is to be used to capture any **ADDITIONAL** measures/details not already covered in the above. Always ensure to make it clear which risk they relate to.*

Summary of Key Issues/Considerations

Provide additional details where appropriate.

Previous RAMS to consider?	No	Urban or rural site?	Urban
Other Contractor Activity?	No.	Working at height?	Yes working on riverbank.
Interface with Public?	Yes – footpath used by walkers and cyclists	Asbestos consideration?	Not anticipated
Night-time Working?	No	Confined space working?	No
Working Near Water?	Yes	[Additional Issue]	No

Method Statement/Sequence of Activity/Task:

Access Arrangements

- Access and egress to BH01 will be from Darwin Road and the South Wales Coastal Path
- Council bollards to be removed from South Wales Coastal Path Access of Darwin Road.

- Following removal of bollards JCB 3CX will access the footpath with TT Banksman in attendance to remove boulders blocking vehicle access.
- Following removal of the boulder the Cable Percussive Rig will be driven along the South Wales Coastal path at walking pace with TT banksman in attendance. Should a member of the public need to pass the rig will be stopped and the member of the public guided safely around the stationary rig before continuing to BH01.
- BH02 accessed from Riverside Road. Cable percussive rig will be driven onto the location with TT banksman in attendance.

Buried Service Clearance

- TT Engineer and Midland Survey Ltd to assess the location of the of service scaring and coverers and scan using GPR CAT & Signal Generator and agree an offset for exploratory hole locations required nearby.
- All exploratory holes to be scanned using GPR, CAT and Genny and marked up prior to excavation.

Hand Pitting

- Prior to excavation Permit to Dig will be issued.
- Hand pits will be excavated at each borehole location to 1.20m bgl.
- BH02 will require concrete breaking out with a hydraulic breaker prior to advancing handpit.
- Sub sampling and in-situ testing to be undertaken from the spoil material only.

Cable Percussive Drilling

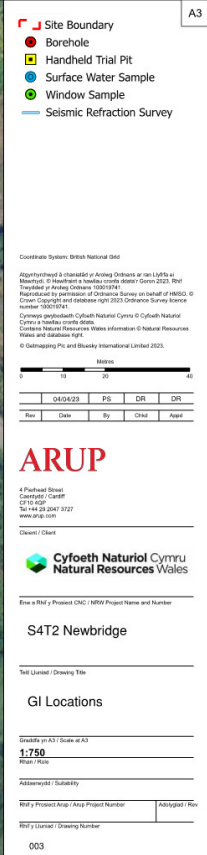
- Cable Percussive rig to be operated in line with Apex Drilling Services RAMS.
- TT Engineer to stay clear of cable percussive rig at all times.

Reinstatement

- Exploratory cable percussive positions will be backfilled with bentonite pellets.
- Turf removed will be replaced.
- Concrete broken out will be replaced with concrete.

Site Map (If Applicable):

Including parking and site access details/access routes/activity locations.



Details of any Permits/Licences:

Tetra Tech Permit to Dig.

Personnel and Contact Numbers:

TT PM: Nicholas Bool, 07917 735669

TT Supervisor: James Craddock, 07966 534346

Details of Equipment, Materials and Plant

Please list each item and include responsible persons.

Item	Responsible Person(s)	Item	Responsible Person(s)
Ground Penetrating Radar	Midland Survey	CAT & Genny	Midland Survey
CAT & Genny	James Craddock	Hand Vane	James Craddock
Vans/4x4	Midland Survey, Apex Drilling Services James Craddock	Cable Percussive Rig	Apex Drilling Services

Details of Mandatory Personal Protective Equipment (PPE):

Please tick all checkboxes that apply.

					
Eye protection	Face Shield	Foot Protection	Hand Protection	Head Protection	Hearing Protection
☐	☐	☒	☒	☒	☐
					
Protective clothing	Respiratory protection	Safety Harness	High visibility clothing	Face mask	Life jacket
☐	☐	☐	☒	☐	☐

Other required PPE / Specific details of PPE:

Details of any Security Arrangements:

Please include details of security requirements. e.g. Codes, Security clearance, Escort details.

Attend ABP induction prior to works commencing.

Welfare Arrangements:

Nearest onsite/public welfare facilities.

Groundhog unit will be available for TT engineer and Operatives on Riverside Road outside ABP gate.

Nearest Hospital:

Morrison Hospital, Heol Maes Eglwys, Morrison, Swansea, SA6 6NL

Tel: 01792 702222

Buddy Details (if applicable):

Buddy Name and Contact Details:	Name: Nicholas Bool	Check-ins:	Arriving on site
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	Mobile: 07917 735669 Signature to confirm aware:	<i>Check-ins should be conducted as follow:</i>	When leaving the site for home
Lone Working Arrangements: NA			
Emergency Contact Details/Emergency Arrangements:			
Site/Client Contact: Elinor Meloy NRW, 07817 026477 TT Contact #1: Nicholas Bool 07917 735669 TT Contact #2: Chris Pugh 07711 086236 SSHEQ Out of Hours Emergency Support Line: 07920 703 197 SSHEQ Near-Miss Reporting Form: SSHEQ (sharepoint.com)			
Quality Control and Method Statement Approvals:			
Prepared by:	Nicholas Bool	Signed & Dated:	 10/10/23
Approved by:	Chris Pugh	Signed & Dated:	 10/10/23
By signing below, I confirm that: - I have read, understood, and had the opportunity to ask questions regarding the risks and method statement associated with this activity/task - I will follow all the measures detailed above to control and mitigate the risks associated with this activity/task - In the event of any deviations from this Method Statement, I understand I must STOP, reassess the activity/task and escalate to the Project Manager/Site Supervisor - I acknowledge that failure to do so could compromise my own health and safety and that of others which could result in action being taken			
Name:	Date:	Signature:	

Doc Ref Number:	SSHEQ-H&S-008b	Version:	2
Owner:	Group SSHEQ	Department:	SSHEQ
Date of last review:	April 2022	Date of next review:	April 2024

Cable Percussive Boreholes

Description (Project Title)	Newbridge GI	Project Number	784-B048567	Issue date	10/10/23
Initially Prepared by	Nicholas Bool	Specific assessment	Cable Percussive Drilling	Approved by	Chris Pugh
Address/Site Location	Riverside Road, Port Talbot, SA6 6NL	Tel:	07817 026477	E-mail	elinor.meloy@cyfoethnaturiolcymru.gov.uk
Scope of Activity	2 No. Cable Percussive Boreholes				

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
1.	Risk of member of the public or site personnel being struck by equipment whilst it is in transit.	3	3	9	Cable Percussive Rig to be tracked at walking pace to BH01 along the existing footpath on the western bank with suitably qualified TT banksman present at all times.	1	2	2	Review on Arrival

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
					Access to BH02 is from the highway. Cable percussive rig to be driven onto the location with the TT banksman in attendance. BH01 - JCB 3CX to be used to remove boulder from South Wales Coastal Path entrance location off Darwinn Road				
2.	Driving to site	2	5	10	Drivers should take breaks before and during journey to work to alleviate fatigue. If a driver feels tired during a journey they should pull over at the nearest safe location for a rest before continuing the journey. Drivers should not operate under the influence of	1	5	5	

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
					drugs or alcohol. Drivers should respect other road users at all times.				
3.	Striking of known or unknown utilities/services.	3	5	15	Pre-start assessment of exploratory hole locations by TT Supervisor. GPR and CAT & Genny location of the site by Midland Survey.	1	5	5	
4.	Environmental risk (fuel spillage whilst refuelling)	3	2	6	Refueling of able percussive rigs to be undertaken with the deployment of a drip tray and plant nappy below.	1	2	2	
5.	Poor manual handling resulting in Injury	3	3	9	Large bulks will be broken down into two separate bulks to ensure they are below the 20kg. Engineer should be comfortable with any load and	1	3	3	

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		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
					employ the correct lifting technique outlined in the Tetra Tech COPS.				
6.	Exposure to contaminated water, sediments or soils.	1	3	3	If potentially grossly contaminated material is identified by the Tetra Tech engineer during works digging will be stopped and a RED site operation will take effect with requirement for jet washing of equipment in suitable wash down area and provision of further PPE including RPE equipment and Tyvek suits.	1	1	1	
7.	Exposure to asbestos containing materials (ACM)	2	5	10	If possible ACMs are encountered, the asbestos risk assessment procedure will be followed, as included in	1	5	5	

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
					Appendix D. Namely, additional PPE may be required, namely Tyvek suits and RPE equipment. Damping down of soil will be undertaken as required to limit potential for release of fibres				
9.	Slips, trips and falls.	3	3	9	Care to be taken when traversing footpath verges. Care to be taken when accessing stockpile. TT Engineer to assess easiest access route prior to traversing.	1	3	3	Review access with site owner on arrival.
10.	Moving parts of machinery	2	4	8	TT Engineer not to approach cable percussive rig while in operation. HERAS fence panels to be deployed around	1	4	4	

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
					the drilling rig to prevent access to moving parts when in operation.				
11.	Falls from Height	3	4	12	TT Engineer to stay away from embankment edges as far as is reasonably practicable. Apex crew to stay clear of riverbank edges as far as is reasonably practicable. HERAS fencing to act as physical barrier with riverbank edge.	1	4	4	
12.	Drowning	2	5	10	TT Engineer to stay away from embankment edges as far as is reasonably practicable. Apex crew to stay clear of riverbank edges as far as is reasonably practicable.	1	5	5	

Hazard Ref No.	Hazard Description (Provide project specific details of the hazard, the task from which it originates, and identify who may be harmed)	Risk Level Before Control Measures			Control Measures Required (To eliminate hazard or reduce risk, consider the general principles of prevention. Identify who is responsible for completing the action. Identify if a more detailed risk assessment is required i.e. COSHH, DSEAR, Manual Handling, Noise)	Risk Level After Control Measures			Comments / Additional Information on Residual Risk (Reference more detailed risk assessment if completed i.e. COSHH, DSEAR, Manual Handling, Noise)
		Likelihood (1-5)	Severity (1-5)	Risk Rating		Likelihood (1-5)	Severity (1-5)	Risk Rating	
					HERAS fencing to act as physical barrier with riverbank edge.				

By signing below, I confirm that:

- I have read, understood, and had the opportunity to ask questions regarding the risks associated with this activity/task
- I will follow all the measures detailed above to control and mitigate the risks associated with this activity/task
- In the event of any deviations from this Risk Assessment and any associated Method Statement, I understand I must **STOP**, reassess the activity/task and escalate to the Project Manager/Director/Site Supervisor
- I acknowledge that failure to do so could compromise my own security, safety, health or wellbeing and that of others which could result in action being taken

Print Name:	Date:	Signature:
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		Likelihood of exposure to hazard					Consider ERIC <u>ELIMINATE</u> the hazard completely <u>REDUCE</u> the risk to a more acceptable level <u>INFORM</u> workforce/others <u>CONTROL</u> the residual risk Also consider the 'General Principles of Prevention' (See CDM ACoP: Appendix 7)
		Likely (5)	Probable (4)	Possible (3)	Remote (2)	Improbable (1)	
Severity of foreseeable consequences		Exposure to the hazard will occur frequently during the activity (more than 10 events per year)	Exposure to the hazard can be expected to occur during the activity (2 to 10 events per year)	Exposure to the hazard will occur occasionally during the activity (1 event every 1 to 10 years)	Exposure to the hazard will seldom occur during the activity (1 event every 10-100 years)	Exposure to the hazard is highly unlikely during the activity (1 event every 100+ years)	
Catastrophic (5)	Accident involving one or more fatalities	25	20	15	10	5	
Major (4)	Major accident under RIDDOR, or permanent ill health reportable	20	16	12	8	4	
Serious (3)	Accident necessitating time off work, or chronic or acute	15	12	9	6	3	
Minor Injury (2)	Accident not necessitating time off work, or minor health	10	8	6	4	2	
Incident (1)	Near miss, no injury sustained, or ill health	5	4	3	2	1	

Note: If the risk level after control measures remains in the Red zone (a residual score of between 20 and 25), then the activity should not proceed until the risk(s) are escalated through Line Management and further controls are identified, agreed and implemented.

If after escalation the risk(s) cannot be reduced further, it may be decided by the Project team that the activity/project does not commence.

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Owner:	Group SSHEQ	Department:	SSHEQ
Date of last review:	November 2022	Date of next review:	November 2024

Tetra Tech Group Activity Risk Assessment

Project Name:			Produced/Revised by	Date:	Approved by: Line Manager
Project No:					
Site Address					
Date:					
Hazardous Activity	Duration		Persons at Risk	Required Control Measures	
	From	To			
Confined Spaces (Description)					
Working at height (Description)					
Lone working/working in remote locations (Description)					
Other (Description)					

Tetra Tech Group Activity Risk Assessment

Project Name:			Project Number:			Scope of Design Work			
Hazard Ref No. (Refer to DRA for Numbering. If Tetra Tech not acting as PD, ask for DRA from project PD)	Date	Hazard / Change in Method (include new hazards / change in method description if applicable)	Risk Level Before Design Alteration / Mitigation	Design Alteration / Action (to eliminate hazard or reduce risk)	New Hazards Associate with Design Alteration / Action (list new hazards potentially being presented as a result of change in method / action)	Overall Risk Level After Design Alteration / Action	Sub-Contractor Senior Management Approval (if applicable) Signature and Date	Senior Management Approval Signature & Date	