

WATER QUALITY PROTECTION NOTES

IT IS PROPOSED TO RESTORE 1700m OF CONCRETE FURROWS TO BLANKET BOLL AND NOT NEAR HARVEST. FOLLOWING FELLING AND RESTORATION MEASURES WILL BE IMPLEMENTED IN THESE HARVEST BLOCKS. THE MAIN RESTORATION MEASURES PROPOSED INCLUDE: BOLL BLOCKING, SURFACE RESTORATION AND RE-PROFILING.

ALL PROPOSED BOLL RESTORATION WORKS AT THE DERRYCLARE SITE WILL BE IN ACCORDANCE WITH THE BEST PRACTICE FOREST SERVICE REGULATION, POLICIES AND STRATEGIC GUIDANCE DOCUMENTS AS WELL AS COLLITE AND FOREST SERVICE GUIDANCE DOCUMENTS TO ENSURE MINIMAL POTENTIAL NEGATIVE EFFECTS ON THE LOCAL HYDROLOGICAL ENVIRONMENT.

DETAILED RESTORATION MEASURES FOR WATER QUALITY PROTECTION DURING THE RESTORATION WORKS ARE PRESENTED AT SECTIONS 9.3.2.3 AND 9.3.2.4 OF THE PLAN. A SUMMARY OF THESE MEASURES AND ACTIONS ARE LISTED BELOW.

DURING THE RESTORATION WORKS WATER QUALITY PROTECTION MEASURES WILL INCLUDE:

SEMI-CONTROLS

1. TOOL BOX TALKS (TBTs) WITH RESPECT TO THE IMPLEMENTATION OF MEASUREMENT CONTROL MEASURES WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
2. AQUATIC BUFFER ZONES, INCLUDING A 10M BUFFER TO WATERCOURSES AND A 5M BUFFER TO RELEVANT WATERCOURSES WILL BE IDENTIFIED.
3. DEMONSTRATION AND AVOIDANCE OF HOT SPOTS AND HOT SPOTS WILL BE IDENTIFIED.
4. USE OF BOLL MATS WHERE REQUIRED.
5. USE OF LOW CHURNING PRESSURE EXCAVATION WITH WIDE TRACKS (7m OR GREATER).
6. DRAINAGE BLOCKING: THE MAIN COLLECTOR DRAINAGE NEAREST THE NATURAL WATERCOURSE WILL BE BLOCKED FIRST AND SALT TRAPS WILL BE INSTALLED AS REQUIRED. THEN THE OPERATOR SHALL MOVE AWAY AT THE HARVEST POINT AND WORK SYSTEMATICALLY DOWNSTREAM TOWARDS THE WATERCOURSE.
7. SALT TRAPS WILL BE INSTALLED AT THE OUTFALLS OF EXISTING FORESTRY DRAINAGE NETWORKS OF THE WORK AREA BEFORE ANY WORK COMMENCES.
8. SALT FENCING WILL BE INSTALLED, MONITORED AND MAINTAINED FOR THE DURATION OF THE WORKS.
9. WORKS WILL BE SUSPENDED OR SCALED BACK PRIOR TO ANY FOLLOWING PERIOD OF HEAVY, EXTENSIVE AND/OR PROLONGED RAINFALL, AND.
10. ALL OUTLETS OF THE COLLECTOR AND PERMANENT DRAINAGE WILL BE BLOCKED.

STORMCEREBOL/CHALLENGES

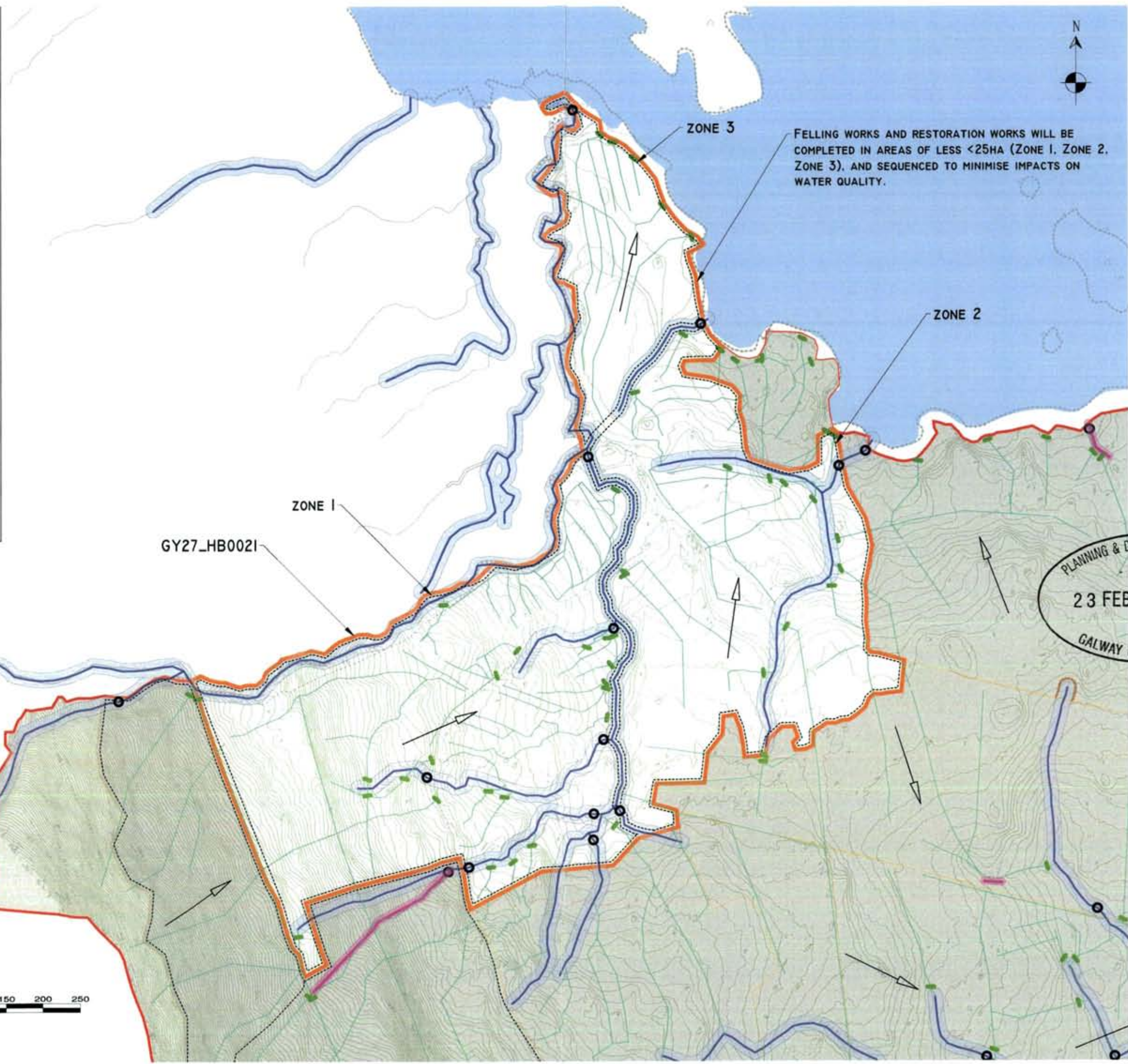
11. TOOL BOX TALKS (TBTs) WITH RESPECT TO THE SERVICES AND EMERGENCY RESPONSE PROCEDURES, WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
12. THERE WILL BE NO FUEL OR FUEL-RELATED STORES WITHIN 50M OF AN AQUATIC ZONE OR WITHIN 20M OF ANY OTHER WATER FEATURE.
13. ALL ROAD-BUILDING VEHICLES WILL BE REPAIRED OFF SITE.
14. ON-SITE REPAIRS WILL BE UNDERTAKEN USING A DOUBLE DOUBLE DRAINAGE BARRIER WITH FULL KITS LEFT ON SITE FOR ACCIDENTAL LEAKAGES OR SPILLS.
15. ONLY DESIGNATED TRAINED OPERATORS WILL BE ALLOWED TO REPAIR PUMP ON-SITE.
16. FUEL AND OIL STORES INCLUDING TANKS AND DRUMS WILL BE REGULARLY INSPECTED FOR LEAKS AND SIGNS OF DAMAGE.
17. THE PLANT USED DURING CONSTRUCTION WILL BE REGULARLY MAINTAINED FOR LEAKS AND PROTECT FOR FUEL, OIL AND.
18. THE CEMP INCLUDES AN EMERGENCY RESPONSE PLAN FOR THE CONSTRUCTION PHASE TO DEAL WITH ACCIDENTAL SPILLS.

IF WATER POLLUTION IS IDENTIFIED THE FOLLOWING STEPS SHOULD BE TAKEN:

STOP: WORK IN THE IMMEDIATE AREA SHOULD BE STOPPED AND THE SOURCE OF THE POLLUTION IDENTIFIED.

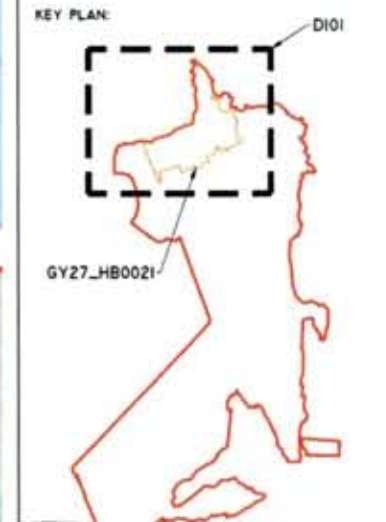
CONTAIN: THE SOURCE OF THE POLLUTION SHOULD BE BARRIED USING A SUITABLE METHOD. NATURAL WATERCOURSES SHOULD BE TEMPORARILY DIVERTED AROUND THE SOURCE OF POLLUTION (IF APPROPRIATE).

NOTIFY: THE RELEVANT AUTHORITIES (Site Manager / Foreman / MPWS / LOCAL AUTHORITY ETC.) SHOULD BE NOTIFIED IMMEDIATELY TO ENSURE THAT MEASURES CAN BE IMPLEMENTED IMMEDIATELY TO PROTECT FURTHER USE OTHER SENSITIVE AREAS.



FELLING WORKS AND RESTORATION WORKS WILL BE COMPLETED IN AREAS OF LESS <25HA (ZONE 1, ZONE 2, ZONE 3), AND SEQUENCED TO MINIMISE IMPACTS ON WATER QUALITY.

- LEGEND**
- STUDY AREA
 - HARVEST BLOCK BOUNDARIES
 - EPA RIVERS
 - 10M WATERCOURSE BUFFER
 - HARVEST DRAINS
 - EPA LAKES
 - RELEVANT WATERCOURSES
 - 5M RELEVANT WATERCOURSE BUFFER
 - TEMPORARY SILT TRAPS
 - DRAIN BLOCKING
 - DIRECTION OF RESTORATION WORKS
 - SILT FENCING
 - WORK ZONES <25HA



PLANNING & DEVELOPMENT SECTION
23 FEB 2023 00:00
GALWAY COUNTY COUNCIL

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Job: DERRYCLARE WILD WESTERN
PEATLANDS PROJECT, CO. GALWAY

Title: GY27_HB0021 - CONSTRUCTION PHASE
DRAINAGE LAYOUT

Figure No: D101

Drawing No: P1616-0-0223-A3-D101-Rev A

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Scale: 1:5,000 (A3) Drawn By: GD

Date: 07/02/2023 Checked By: MG

WATER QUALITY PROTECTION NOTES

IT IS PROPOSED TO REMOVE (CROSS) OF COMMERCIAL FOREST TO BLANKET BIRCH AND HAY MEADOWS. FOLLOWING FOLLOWING, AND RESTORATION MEASURES WILL BE IMPLEMENTED IN THESE HARVEST BLOCKS. THE MAIN RESTORATION MEASURES PROPOSED INCLUDE DRAIN BLOCKING, SURFACE STRUCTURES AND RE-PROFILING.

ALL PROPOSED AND RESTORATION WORKS AT THE DEVELOPMENT SITE WILL BE IN ACCORDANCE WITH THE BEST PRACTICE FOREST SERVICE POLLUTION POLICIES AND STRATEGIC GUIDANCE DOCUMENTS AS WELL AS LOCAL AND FOREST SERVICE GUIDANCE DOCUMENTS TO ENSURE MINIMAL POTENTIAL NEGATIVE IMPACTS ON THE LOCAL HYDROLOGICAL ENVIRONMENT.

DETAILED MITIGATION MEASURES FOR WATER QUALITY PROTECTION DURING THE RESTORATION WORKS ARE PRESENTED AT SECTIONS 9.3.2.3 AND 9.3.2.4 OF THE EIA. A SUMMARY OF THESE MITIGATION AND MEASURES ARE PROVIDED HERE FOR REFERENCE.

DURING THE RESTORATION WORKS WATER QUALITY PROTECTION MEASURES WILL INCLUDE:

General Controls

1. THIS DRAWING (D102) WITH RESPECT TO THE IMPLEMENTATION OF RESTORATION MEASURES WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
2. ANALYTIC BUFFER ZONES, INCLUDING A 10M BUFFER TO WATERCOURSES, AND A 5M BUFFER TO RELEVANT WATERCOURSES WILL BE IDENTIFIED.
3. IDENTIFICATION AND AVOIDANCE OF HOT SPOTS AND HOT AREAS WILL BE UNDERTAKEN.
4. LAY OF SOIL WITH WORKS REQUIRED.
5. USE OF LOW VIBRATION EXCAVATION WITH WIDE TRACKS (1.5M OR GREATER).
6. DURING DRAIN BLOCKING THE MAIN COLLECTION DRAIN NEAREST THE NATURAL WATERCOURSE WILL BE BLOCKED FIRST AND SOIL TRAPS WILL BE INSTALLED AS REQUIRED. THEN THE OPERATOR SHALL DRAIN WORK AT THE HARVEST POINT AND BEGIN SYSTEMATICALLY DRAINAGE TOWARDS THE WATERCOURSE.
7. SOIL TRAPS WILL BE INSTALLED AT THE OUTFALLS OF EXISTING FORESTED DRAINS DOWNSLOPE OF THE DRAIN AREA BEFORE ANY WORK COMMENCES.
8. SOIL TRAPS WILL BE INSTALLED, DIRECTED AND MAINTAINED FOR THE DIRECTION OF THE DRAIN.
9. WORKS WILL BE SUSPENDED IF SEVERE DRAIN PRIOR TO ANY FOLLOWING PERIOD OF HEAVY RAINFALL OR OTHER WEATHER CONDITIONS.
10. ALL OUTFALLS OF THE COLLECTION AND DRAINAGE DRAINAGE WILL BE SECURED.

Environmental Controls

1. THIS DRAWING (D102) WITH RESPECT TO THE IMPLEMENTATION AND MONITORING OF RESTORATION MEASURES WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
2. THERE WILL BE NO FILL OR REMOVALS OF SOIL WITHIN 50M OF AN ADJACENT ZONE OR WITHIN 20M OF ANY OTHER WATER FEATURE.
3. ALL ROAD WORKS OPERATIONS WILL BE COMPLETED OFF SITE.
4. ON SITE OPERATIONS WILL BE UNDERTAKEN USING A DOUBLE DOUBLE DRAINAGE WITH SPILL KITS KEPT ON SITE FOR ACCIDENTAL LEAKAGES OF POLLUTANTS.
5. ON 1 DESIGNATED TRAFFIC OPERATIONS WILL BE AUTHORIZED TO REPAIR PLANT ON SITE.
6. FUEL AND OIL STORES INCLUDING TANKS AND DRUMS WILL BE REGULARLY INSPECTED FOR LEAKS AND SIGNS OF DAMAGE.
7. THE PLANT USED DURING CONSTRUCTION WILL BE REGULARLY INSPECTED FOR LEAKS AND FITNESS FOR PURPOSE, AND.
8. THE CEMP INCLUDES AN EMERGENCY RESPONSE PLAN FOR THE CONSTRUCTION PHASE TO DEAL WITH ACCIDENTAL SPILLS.
9. WATER POLLUTION IS IDENTIFIED THE FOLLOWING STEPS WOULD BE UNDERTAKEN TO:

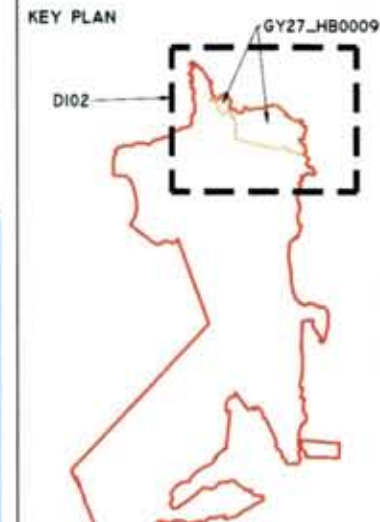
STOP - WORK IN THE IMMEDIATE AREA SHOULD BE STOPPED AND THE SOURCE OF THE POLLUTANT IDENTIFIED.

CONTAIN - THE SOURCE OF THE POLLUTANT SHOULD BE SECURED USING A SUITABLE METHOD. NATURAL WATERCOURSES SHOULD BE TEMPORARILY DIVERTED AROUND THE SOURCE OF POLLUTANT IF APPROPRIATE.

NOTIFY - THE RELEVANT AUTHORITIES (EPA / FARMER / FISHING / LOCAL AUTHORITY ETC.) SHOULD BE NOTIFIED IMMEDIATELY TO ENSURE THAT NECESSARY CAN BE IMPLEMENTED IMMEDIATELY TO PROTECT FISHING AND OTHER SENSITIVE AREAS.



- LEGEND**
- STUDY AREA
 - HARVEST BLOCK BOUNDARIES
 - EPA RIVERS
 - 10M WATERCOURSE BUFFER
 - HARVEST DRAINS
 - EPA LAKES
 - RELEVANT WATERCOURSES
 - 5M RELEVANT WATERCOURSE BUFFER
 - TEMPORARY SILT TRAPS
 - DRAIN BLOCKING
 - DIRECTION OF RESTORATION WORKS
 - SILT FENCING
 - WORK ZONES <25HA



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COILLTE

Job:

DERRYCLARE WILD WESTERN
PEATLANDS PROJECT, CO. GALWAY

Title:

GY27_HB0009 - CONSTRUCTION PHASE
DRAINAGE LAYOUT

Figure No:

D102

Drawing No:

P1616-0-0223-A3-D102-Rev A

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P1616-0

Scale:

1:5,000 (A3)

Drawn By:

GD

Date:

07/02/2023

Checked By:

MG

WATER QUALITY PROTECTION NOTES:

IT IS PROPOSED TO RESTORE -ZONES OF COMMERCIAL FORESTRY TO BLAUGHTY BAY AND WEST MOUNTAIN. FOLLOWING FOLLOWS THE RESTORATION MEASURES TO BE IMPLEMENTED IN THESE HARVEST BLOCKS. THE MAIN RESTORATION MEASURES PROPOSED INCLUDE: STAIN, REDUCE, SURFACE, SMOOTHING AND REPROFILING.

ALL PROPOSED RESTORATION WORKS AT THE DERRYLARE SITE WILL BE IN ACCORDANCE WITH THE BEST PRACTICE FOREST SERVICE REGULATION, POLICY AND STRATEGIC GUIDANCE DOCUMENTS, AS WELL AS COLLITE AND FOREST SERVICE GUIDANCE DOCUMENTS TO ENSURE MINIMAL, POSITIVE, NEGATIVE EFFECTS ON THE LOCAL ECOSYSTEMAL ENVIRONMENT.

DETAILED INFORMATION REQUIRED FOR WATER QUALITY PROTECTION DURING THE RESTORATION WORKS ARE PROVIDED AT SECTIONS 9.5.2.3 AND 9.5.2.4 OF THE EIA. A SUMMARY OF THESE INFORMATION ARE INCLUDED HERE FOR REFERENCE.

DURING THE RESTORATION WORKS, WATER QUALITY PROTECTION MEASURES WILL INCLUDE:

SEVERITY LIMITS:

1. THIS RISK TAKES (RTT) WITH RESPECT TO THE IMPLEMENTATION OF RESTORATION MEASURES WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
2. AGRICULTURAL BUFFER ZONES, INCLUDING A 10M BUFFER TO WATERCOURSES, AND A 5M BUFFER TO RELEVANT WATERCOURSES WILL BE MAINTAINED.
3. IDENTIFICATION AND SURVEILLANCE OF HOT SPOTS AND HOT SPOTS WILL BE MAINTAINED.
4. USE OF SOIL MATS WILL BE REQUIRED.
5. USE OF SOIL COVERING PRESSURE EXHAUSTOR WITH WIDE TRACKS IF ON OR NEAR TRACKS.
6. DRAINAGE BLOCKING THE MAIN COLLECTOR DRAINAGE SYSTEMS WILL BE MAINTAINED AS REQUIRED. THE MAIN COLLECTOR DRAINAGE SYSTEMS WILL BE MAINTAINED AS REQUIRED. THE MAIN COLLECTOR DRAINAGE SYSTEMS WILL BE MAINTAINED AS REQUIRED.
7. SILT TRAPS WILL BE INSTALLED AT THE OUTFALLS OF RESTORATION PARCELS. SILT TRAPS WILL BE INSTALLED AT THE OUTFALLS OF RESTORATION PARCELS. SILT TRAPS WILL BE INSTALLED AT THE OUTFALLS OF RESTORATION PARCELS.
8. SILT TRAPS WILL BE MAINTAINED, MONITORED AND MAINTAINED FOR THE DURATION OF THE WORKS.
9. WORKS WILL BE COMPLETED OR SCALED BACK PRIOR TO ANY FOLLOWING PERIODS OF HEAVY, EXTENSIVE AND/OR PROLONGED RAINFALL, AND.
10. ALL OUTFALLS OF THE COLLECTOR AND PERENNIAL DRAINAGE WILL BE MAINTAINED.

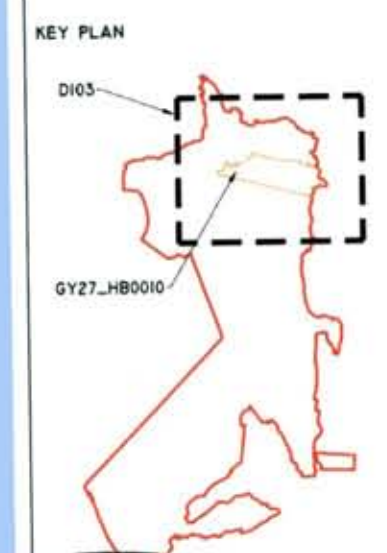
ENVIRONMENTAL CONSIDERATIONS:

11. THIS RISK TAKES (RTT) WITH RESPECT TO THE HARVEST AND HARVESTING USE, AND ENVIRONMENTAL CONSIDERATIONS, WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
12. THERE WILL BE NO FILL OR REMOVAL OF STONES WITHIN 50M OF AN AQUATIC ZONE OR WITHIN 20M OF ANY FISH WATER PLANTING.
13. ALL ROADWORKS WILL BE MAINTAINED BY 100% OFF SITE.
14. ON SITE WASTE WILL BE MAINTAINED USING A MOBILE COMPOST BINDER. ON SITE WASTE WILL BE MAINTAINED USING A MOBILE COMPOST BINDER. ON SITE WASTE WILL BE MAINTAINED USING A MOBILE COMPOST BINDER.
15. ONLY QUALIFIED TRUCKS OPERATORS WILL BE AUTHORIZED TO ENTER PLANT ON SITE.
16. FUEL AND OIL STORES INCLUDING TANKS AND DRUMS WILL BE REGULARLY INSPECTED FOR LEAKS AND SPILLS OF FUELS.
17. THE PLANT AND DRUMS CONSTRUCTION WILL BE REGULARLY INSPECTED FOR LEAKS AND SPILLS OF FUELS.
18. THE CONSTRUCTION WILL BE REGULARLY INSPECTED FOR LEAKS AND SPILLS OF FUELS.
19. THE CONSTRUCTION WILL BE REGULARLY INSPECTED FOR LEAKS AND SPILLS OF FUELS.
20. THE CONSTRUCTION WILL BE REGULARLY INSPECTED FOR LEAKS AND SPILLS OF FUELS.

NOTES: THE RELEVANT AUTHORITIES (EPA, FISH & FISHERIES, IRLAND) SHOULD BE NOTIFIED IMMEDIATELY TO ENSURE THAT RESTORATION WORKS CAN BE IMPLEMENTED WITHOUT TO INTERFERE WITH OTHER RESTORATION AREAS.



- LEGEND**
- STUDY AREA
 - HARVEST BLOCK BOUNDARIES
 - EPA RIVERS
 - 10M WATERCOURSE BUFFER
 - HARVEST DRAINS
 - EPA LAKES
 - RELEVANT WATERCOURSES
 - 5M RELEVANT WATERCOURSE BUFFER
 - TEMPORARY SILT TRAPS
 - DRAIN BLOCKING
 - DIRECTION OF RESTORATION WORKS
 - SILT FENCING
 - WORK ZONES <25HA



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PEATLANDS PROJECT, CO. GALWAY

Title: GY27_HB0010 - CONSTRUCTION PHASE
DRAINAGE LAYOUT

Figure No: DI03

Drawing No: P1616-0-0223-A3-DI03-Rev A
Sheet Size: A3 Project No.: P1616-0
Scale: 1:5,000 (A3) Drawn By: GD
Date: 07/02/2023 Checked By: MG

WATER QUALITY PROTECTION NOTES:

IT IS PROPOSED TO RESTORE 250m OF COMMERCIAL FOREST TO BLANKET BOG AND REVEAL HARTLE. FOLLOWING FLOODING, THE RESTORATION MEASURES WILL BE IMPLEMENTED IN THESE HARVEST BLOCKS. THE MAIN RESTORATION MEASURES PROPOSED INCLUDE DRAIN BLOCKING, SURFACE INFILLING AND REVEALING.

ALL HARVEST BOG RESTORATION WORKS AT THE DERRYLATT SITE WILL BE IN ACCORDANCE WITH THE BEST PRACTICE FOREST SERVICE REGULATION POLICIES AND STRATEGIC GUIDANCE DOCUMENTS AS WELL AS COLLITE AND FOREST SERVICE GUIDANCE DOCUMENTS. THE DERRYLATT SITE IS A DESIGNATED SPECIAL AREA OF SCIENTIFIC INTEREST (SASI) AND IS A MEMBER OF THE DERRYLATT SITE.

DETAILED MITIGATION MEASURES FOR WATER QUALITY PROTECTION DURING THE RESTORATION WORKS ARE PRESENTED AT SECTIONS 9.3.2.3 AND 9.3.2.4 OF THE PLAN. A SUMMARY OF THESE MITIGATION MEASURES IS PROVIDED FOR REFERENCE.

DURING THE RESTORATION WORKS WATER QUALITY PROTECTION MEASURES WILL INCLUDE:

SEWERAGE CONTROL

1. THIS BEST PRACTICE (BPP) WITH RESPECT TO THE IMPLEMENTATION OF SEWERAGE CONTROL MEASURES WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
2. AGRICULTURAL DRAINAGE, INCLUDING A 10M BUFFER TO WATERCOURSES, AND A 5M BUFFER TO RELEVANT WATERCOURSES WILL BE IDENTIFIED.
3. IDENTIFICATION AND CLOSURE OF ANY SEPTIC AND SEPTIC TANKS WILL BE REQUIRED.
4. USE OF SEPTIC TANKS WILL BE PROHIBITED.
5. USE OF LOW VOLUME PRESSURE SPRINKLERS WITH NOZZLES (2.0m OR GREATER).
6. DRAINAGE DRAINAGE ALONG THE MAIN COLLECTION DRAINAGE SYSTEM THE NATURAL WATERCOURSE WILL BE BLOCKED FIRST AND ALL TRAPS WILL BE REMOVED AS REQUIRED. THEN THE OPERATOR SHALL WORK UP THE HARVEST POINT AND WORK SYSTEMATICALLY DOWNWARDS TOWARDS THE WATERCOURSE.
7. SILT TRAPS WILL BE INSTALLED AT THE OUTFALLS OF EXISTING PROPERTY DRAINAGE SYSTEMS OF THE WORK AREAS BEFORE ANY WORK COMMENCES.
8. SILT TRAPS WILL BE INSTALLED, INSPECTED AND MAINTAINED FOR THE DURATION OF THE WORK.
9. TRAPS WILL BE SUPPLIED ON SCAFFOLD BATH PRIOR TO AND FOLLOWING PERIODS OF HEAVY RAINFALL AND/OR PROLONGED RAINFALL.
10. ALL OUTFALLS OF THE COLLECTION AND DRAINAGE DRAINAGE WILL BE BLOCKED.

CONSTRUCTION/OPERATIONS

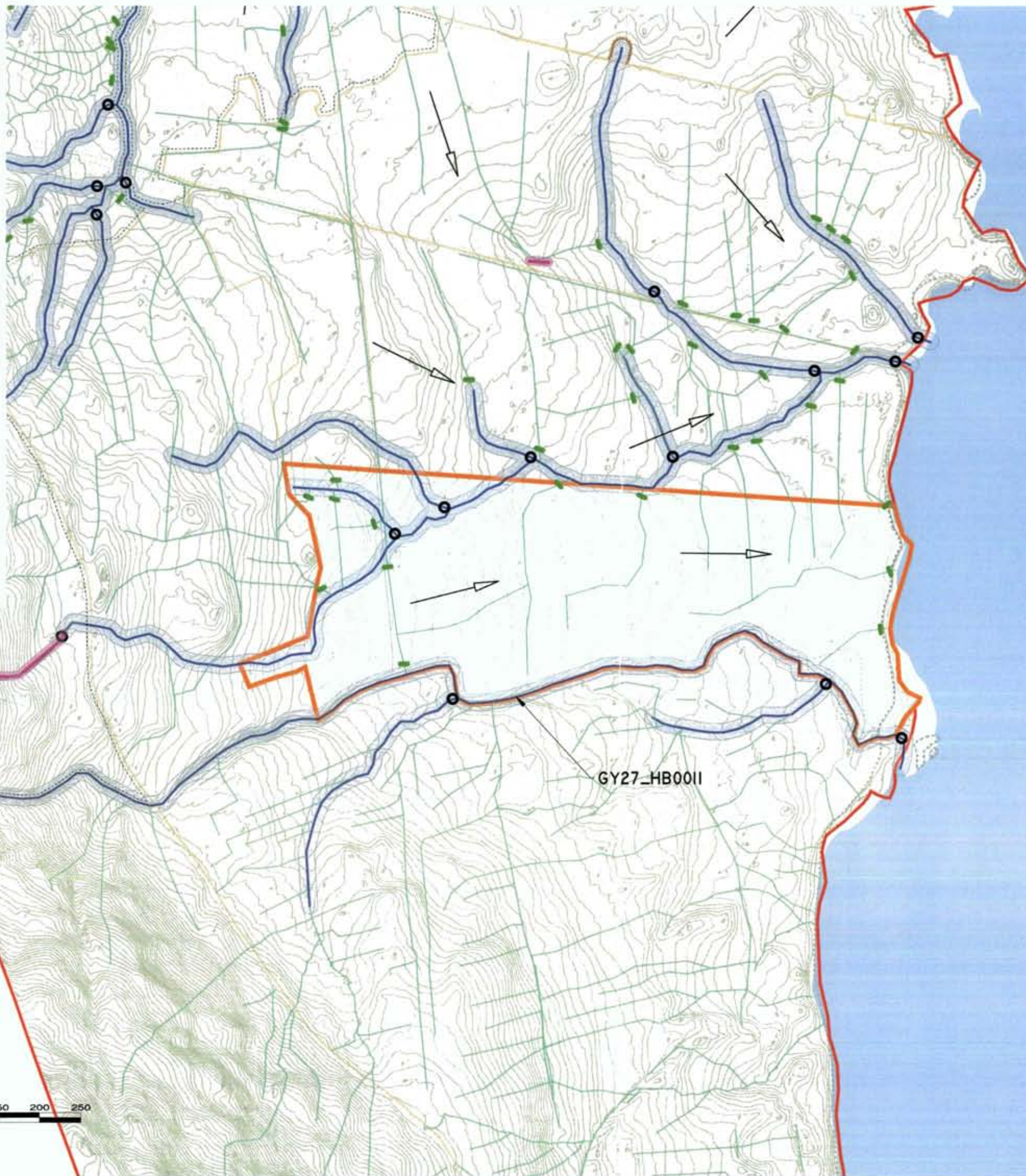
11. THIS BEST PRACTICE (BPP) WITH RESPECT TO THE HARVEST AND HARVEST AREA USE AND EMERGENCY RESPONSE PROCEDURES WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
12. THERE WILL BE NO FUEL OR FLAMMABLE STORES WITHIN 50M OF AN AGRICULTURAL DRAIN OR WITHIN 20M OF ANY OTHER WATER FEATURE.
13. ALL ROAD VEHICLES WILL BE REPAIRED OFF SITE.
14. ON SITE REPAIRING WILL BE UNDERTAKEN USING A MOBILE COULD TOWNS RIGGING WITH SPILL KITS KEPT ON SITE FOR ACCIDENTAL LEAKAGE OR SPILLAGE.
15. ONLY QUALIFIED TRUCKS OPERATORS WILL BE AUTHORIZED TO REPAIR PLANT ON SITE.
16. FUEL AND OIL STORES INCLUDING TANKS AND DRUMS WILL BE REGULARLY INSPECTED FOR LEAKS AND OILS OF DAMAGE.
17. THE PLANT USED DURING CONSTRUCTION WILL BE REGULARLY INSPECTED FOR LEAKS AND OILS FOR DAMAGE.
18. THE COW WILL BE AN EMERGENCY RESPONSE PLAN FOR THE CONSTRUCTION PHASE TO DEAL WITH ACCIDENTAL SPILLAGE.

IF WATER POLLUTION IS IDENTIFIED THE FOLLOWING STEPS SHOULD BE TAKEN:

STOP: WORK IN THE IMMEDIATE AREA SHOULD BE STOPPED AND THE SOURCE OF THE POLLUTION IDENTIFIED.

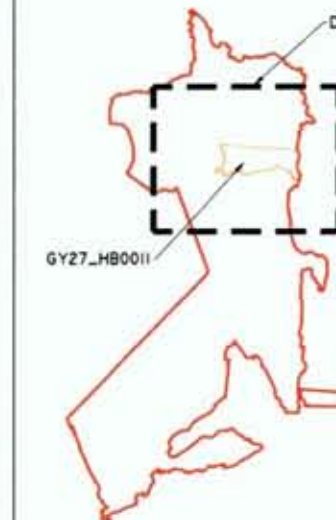
CONTAIN: THE SOURCE OF THE POLLUTION SHOULD BE BARRICADED USING A SUITABLE METHOD. NATURAL WATERCOURSES SHOULD BE TEMPORARILY DIVERTED AROUND THE SOURCE OF POLLUTION (IF APPROPRIATE).

NOTIFY: THE RELEVANT AUTHORITIES (CITY PLANNING / FIREWORKS / LOCAL AUTHORITY ETC.) SHOULD BE NOTIFIED IMMEDIATELY TO ENSURE THAT MEASURES CAN BE IMPLEMENTED SOONEST TO PROTECT FISHWATER AND OTHER SENSITIVE AREAS.



- LEGEND**
- STUDY AREA
 - HARVEST BLOCK BOUNDARIES
 - EPA RIVERS
 - 10M WATERCOURSE BUFFER
 - HARVEST DRAINS
 - EPA LAKES
 - RELEVANT WATERCOURSES
 - 5M RELEVANT WATERCOURSE BUFFER
 - TEMPORARY SILT TRAPS
 - DRAIN BLOCKING
 - DIRECTION OF RESTORATION WORKS
 - SILT FENCING
 - WORK ZONES <25HA

KEY PLAN



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23 FEB 2023 00 60

GALWAY COUNTY COUNCIL

Revisions

Client: COLLITE

Job: DERRYLATT WILD WESTERN PEATLANDS PROJECT, CO. GALWAY

Title: GY27_HB0011 - CONSTRUCTION PHASE DRAINAGE LAYOUT

Figure No: D105

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WATER QUALITY PROTECTION NOTES

IT IS RECOMMENDED TO RESTORE AREAS OF COMMERCIAL FOREST TO BLANKET BIRCH AND HAY MEADOWS. FOLLOWING FELLING, THE RESTORATION MEASURES WILL BE IMPLEMENTED IN THESE HARVEST BLOCKS. THE MAIN RESTORATION MEASURES PROPOSED INCLUDE GRAIN BLOCKING, SURFACE DRAINAGE AND SILT TRAPS.

ALL PROPOSED SOIL RESTORATION WORKS AT THE DERRYLARE SITE WILL BE IN ACCORDANCE WITH THE BEST PRACTICE FOREST SERVICE REGULATION, POLICIES AND STRATEGIC GUIDANCE DOCUMENTS AS WELL AS COILLTE AND FOREST SERVICE GUIDANCE DOCUMENTS TO ENSURE MINIMAL IMPACT ON THE LOCAL HYDROLOGICAL ENVIRONMENT.

DETAILED MITIGATION MEASURES FOR WATER QUALITY PROTECTION DURING THE RESTORATION WORKS ARE PROVIDED AT SECTIONS 9.3.2.3 AND 9.3.2.4 OF THE EIA. A SUMMARY OF THESE MITIGATION AND MEASURES ARE PROVIDED HERE.

DURING THE RESTORATION WORKS WATER QUALITY PROTECTION MEASURES WILL INCLUDE:

SOILWORK CONTROLS

1. THE SOIL TANK (STET) WITH RESPECT TO THE IMPLEMENTATION OF SOILWORK CONTROLS MEASURES WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
2. AQUATIC BUFFER ZONES, INCLUDING A 10M BUFFER TO WATERCOURSES AND A 5M BUFFER TO RELEVANT WATERCOURSES WILL BE IDENTIFIED.
3. IDENTIFICATION AND AVOIDANCE OF HOT SPOTS AND HOT SPOTS WILL BE IDENTIFIED.
4. USE OF SOIL MATS WHERE REQUIRED.
5. USE OF LOW IMPACT PRESSURE EXCAVATION WITH SOIL TRAPS TO THE MINIMUM.
6. DURING GRAIN BLOCKING THE MAIN COLLECTOR DRAINAGE NEAREST THE NATURAL WATERCOURSE WILL BE BLOCKED FIRST AND SOIL TRAPS WILL BE INSTALLED AS REQUIRED. THEN THE OPERATOR SHALL WORK WITHIN THE HARVEST POINT AND WORK SYSTEMATICALLY DOWNSTREAM TOWARDS THE WATERCOURSE.
7. SOIL TRAPS WILL BE INSTALLED AT THE OUTFALLS OF EXISTING FORESTED DRAINAGE SUBSYSTEMS OF THE WORK AREA BEFORE ANY WORK COMMENCES.
8. SOIL TRAPS WILL BE INSTALLED, DIRECTED AND MAINTAINED FOR THE DURATION OF THE WORKS.
9. WORKS WILL BE STOPPED OR SCALED BACK PRIOR TO AND FOLLOWING PERIODS OF HEAVY RAINFALL AND/OR PROLONGED RAINFALL, AND.
10. ALL OUTLETS OF THE COLLECTOR AND PERENNIAL DRAINAGE WILL BE BLOCKED.

HYDROLOGICAL/ENVIRONMENTAL

1. THE SOIL TANK (STET) WITH RESPECT TO THE HYDROLOGICAL AND ENVIRONMENTAL USE, AND EMERGENCY RESPONSE PROCEDURES, WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
2. THERE WILL BE NO FILL OR REMOVALS OF SOIL WITHIN 10M OF ANY AQUATIC ZONE OR WITHIN 5M OF ANY OTHER WATER FEATURE.
3. ALL ROAD WORKS WILL BE COMPLETED OFF SITE.
4. ON SITE REPAIRS WILL BE UNDERTAKEN USING A MOBILE DOSE DISPENSER WITH SPILL KITS LEFT ON SITE FOR ACCIDENTAL LEAKAGES OR SPILLS.
5. ONLY DESIGNATED TRUCKS OPERATING WILL BE AUTHORIZED TO REPAIR PLANT ON SITE.
6. FUEL AND OIL STORES INCLUDING TANKS AND DRUMS WILL BE REGULARLY INSPECTED FOR LEAKS AND SIGNS OF DAMAGE.
7. THE PLANT USED DURING CONSTRUCTION WILL BE REGULARLY INSPECTED FOR LEAKS AND FITTED FOR PURPOSES.
8. THE COILLTE WILLING AN EMERGENCY RESPONSE PLAN FOR THE CONSTRUCTION PHASE TO DEAL WITH ACCIDENTAL SPILLS.

IF WATER POLLUTION IS IDENTIFIED THE FOLLOWING STEPS WOULD BE APPLIED TO:

STOP - WORK IN THE IMMEDIATE AREA SHOULD BE STOPPED AND THE SOURCE OF THE POLLUTANT IDENTIFIED.

CONTAIN - THE SOURCE OF THE POLLUTANT SHOULD BE STOPPED USING A SUITABLE METHOD. NATURAL WATERCOURSES SHOULD BE TEMPORARILY DIVERTED AROUND THE SOURCE OF POLLUTANT (IF APPROPRIATE).

NOTIFY - THE RELEVANT AUTHORITIES (SITE MANAGER / FOREMAN / HSE / LOCAL AUTHORITY ETC.) SHOULD BE NOTIFIED IMMEDIATELY TO ENSURE THAT MEASURES CAN BE IMPLEMENTED IMMEDIATELY TO PROTECT FISHES AND OTHER SENSITIVE AREAS.

ZONE 4
GY27_HB0012

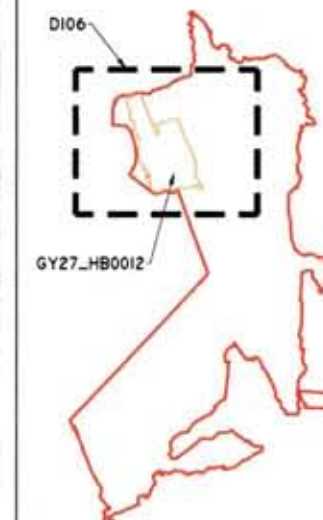
FELLING WORKS AND RESTORATION WORKS WILL BE COMPLETED IN AREAS OF LESS <25HA (ZONE 4, AND ZONE 5), AND SEQUENCED TO MINIMISE IMPACTS ON WATER QUALITY.

ZONE 5



- LEGEND**
- STUDY AREA
 - HARVEST BLOCK BOUNDARIES
 - EPA RIVERS
 - 10M WATERCOURSE BUFFER
 - HARVEST DRAINS
 - EPA LAKES
 - RELEVANT WATERCOURSES
 - 5M RELEVANT WATERCOURSE BUFFER
 - TEMPORARY SILT TRAPS
 - DRAIN BLOCKING
 - DIRECTION OF RESTORATION WORKS
 - SILT FENCING
 - WORK ZONES <25HA

KEY PLAN



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23 FEB 2023 0060

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PEATLANDS PROJECT, CO. GALWAY

Title: GY27_HB0012 - CONSTRUCTION PHASE
DRAINAGE LAYOUT

Figure No: D106

Drawing No: P1616-0-0223-A3-D106-Rev A

Sheet Size: A3 Project No.: P1616-0

Scale: 1:5,000 (A3) Drawn By: GD

Date: 07/02/2023 Checked By: MG

[illegible]

During the Restoration, women's large, bulky, restrictive, protective measures were required.

7. TRAIL RUN TRACT (STRT) WITH RESPECT TO THE IMPLEMENTATION OF THE TRAIL RUN TRACT, HEADQUARTERS WILL BE COMPLETED AT THE START OF THE EXERCISE WORKING FROM NORTH-NORTWEST BUCKLE.
8. AQUATIC SUPPORT ZONES, INCLUDING A ZONE SUPPORT TO WATERCRAFTS AND A ZONE SUPPORT TO RELEVANT INTERCOMMS WILL BE ESTABLISHED.
9. SCOUTING/RECON AND AVOIDANCE OF HOT SPOTS AND HOT AREAS WILL BE ORCHESTRATED.
10. TSP OF HOT AREAS MUST BE FOLLOWED.
11. USE OF LOW ALTITUDE PRESSURE EXERCISES WITH AIR THREATS IS TO BE AVOIDED.
12. DURING BOMB EJECTORS THE MAIN COLLECTOR BEING DIRECTED TO THE VERTICAL WATERCRAFT WILL BE BUCKLED FIRST AND SALT TRACT WILL BE REJECTED AS WELL. TRAIL THE OPERATOR MUST BECOME WORK AT THE REAR OF THE BOMB AND WORK SYSTEMICALLY CIRCULARLY THROUGH THE WATERCRAFT.
13. SALT TRACT WILL BE INSTALLED AT THE OUTFALLS OF EXISTING PATTERN OF BOMB COMPLETION OF THE BOMB AREA BEFORE ANY BOMB COMPLETION.
14. SALT PAVED WILL BE INSTALLED BUCKLED FIRST AND BUCKLED FIRST.
15. BOMB WILL BE INSTALLED OR RELEASED BUCKLED FIRST.
16. BOMB WILL BE INSTALLED OR RELEASED BUCKLED FIRST.
17. BOMB WILL BE INSTALLED OR RELEASED BUCKLED FIRST.
18. ALL OUTFALLS OF THE COLLECTOR AND PATTERNING BOMB WILL BE BUCKLED

Task B-01 (PART 1) OF THE AGREEMENT TO THE HERETOFORE AND HEREAFTER MENTIONED, AND HERETOFORE AND HEREAFTER MENTIONED, SHALL BE COMPLETED AT THE PLACE OF DESTINATION NAMED IN THE BOLD-NAMED BIDDING.

1. THERE SHALL BE NO STALLS OR HOBSEDS STORED WITHIN 500 YD OF ANY ADJACENT SIDE OR OTHER SIDE OF ANY WATER MAIN TREATING.

2. ALL ROAD CLOSURES SHALL BE REMOVED ON SITE.

3. ON-SITE WASTE OIL SHALL BE OBTAINED FROM A REPUTABLE SOURCE, NUMBER WITHIN 100 YD OF THE SITE FOR ACCIDENTAL LEAKAGE OF OILS/PAVES.

4. ONLY DESIGNATED TRAFFIC OPERATORS SHALL BE ALLOWED TO REMOVE PLANT ON SITE.

5. FUEL AND OIL STORES INCLUDING TANKS AND DRUMS SHALL BE SECURELY PROTECTED FROM LEAKS AND OILS OF DAMAGE.

6. THE PLANT AND SURROUNDING CONSTRUCTION SHALL BE SECURELY PROTECTED FROM TRAFFIC AND OTHER DAMAGE.

7. THE OWNER WILL BE RESPONSIBLE FOR THE PLANT AND SURROUNDING CONSTRUCTION PHASE TO DEAL WITH ACCIDENTAL, SPILLED OIL.

8. IF WATER POLLUTION IS DETECTED THE FOLLOWING STEPS SHALL BE APPLIED:

NOTE - WORK IN THE IMMEDIATE AREA SHOULD BE STOPPED AND THE SOURCE OF THE POLLUTANT IDENTIFIED.

[CONTAIN]. THE SOURCE OF THE POLLUTANT SHOULD BE SITED USING A SUITABLE METHOD. NATURAL WATERCOURSES SHOULD BE TEMPORARILY ORIENTED AROUND THE SOURCE OF POLLUTANT (IF APPROPRIATE).

NOTE: The relevant authorities (City Manager / President / Mayor / Local Authority etc.) should be notified immediately to ensure that relevant law enforcement personnel to protect property and other security can be alerted.

-  STUDY AREA
-  HARVEST BLOCK BOUNDARIES
-  EPA RIVERS
-  10M WATERCOURSE BUFFER
-  HARVEST DRAINS
-  EPA LAKES
-  RELEVANT WATERCOURSES
-  5M RELEVANT WATERCOURSE BUFFER
-  TEMPORARY SILT TRAPS
-  DRAIN BLOCKING
-  DIRECTION OF RESTORATION WORKS
-  SILT FENCING
-  WORK ZONES <25HA

The map shows the southern part of Lake Tanganyika. A dashed black box indicates the area shown in the inset map. Two sampling stations are marked: GY27_HB0013 (indicated by a green arrow) and D103 (indicated by a blue arrow).

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2023 0060

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Job: DERRYCLARE WILD WESTERN
PEATLANDS PROJECT, CO. GALWAY

Title: GY27_HB0013 - CONSTRUCTION PHASE
DRAINAGE LAYOUT

Figure No: 0107

Drawing No: P1616-0-0223-A3-D107-Rev A

Sheet Size: A3	Project No.: P1616-0
Scale: 1:5,000 (A3)	Drawn By: GD

Date: 07/02/2023	Checked By: MG
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WATER QUALITY PROTECTION NOTES

IT IS REQUIRED TO PREPARE A STATE OF CONSERVATION REPORT TO ELABORATE ON THE MEASURES TO BE TAKEN TO PROTECT THE WATER QUALITY OF THE HARVEST BLOCKS. THE MEASURES TO BE TAKEN TO PROTECT THE WATER QUALITY OF THE HARVEST BLOCKS WILL BE IMPLEMENTED IN THESE HARVEST BLOCKS. THE MEASURES TO BE TAKEN TO PROTECT THE WATER QUALITY OF THE HARVEST BLOCKS WILL BE IMPLEMENTED IN THESE HARVEST BLOCKS. THE MEASURES TO BE TAKEN TO PROTECT THE WATER QUALITY OF THE HARVEST BLOCKS WILL BE IMPLEMENTED IN THESE HARVEST BLOCKS.

DETAILED MITIGATION MEASURES FOR WATER QUALITY PROTECTION DURING THE RESTORATION WORKS ARE PROVIDED AT SECTIONS 9.5.2.3 AND 9.5.2.4 OF THE PLAN. A SUMMARY OF THESE MITIGATION MEASURES IS PROVIDED HERE FOR REFERENCE.

CONSTRUCTION CONTROLS

1. TOILET BODIES (TOILETS) WITH RESPECT TO THE IMPLEMENTATION OF MITIGATION MEASURES WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
2. AGRICULTURAL SUPPLIES, INCLUDING A 10M BUFFER TO WATERCOURSES, AND A 5M BUFFER TO RELEVANT WATERCOURSES WILL BE IDENTIFIED.
3. IDENTIFICATION AND AVOIDANCE OF HOT SPOTS AND HOT SPOTS WILL BE UNDERTAKEN.
4. USE OF BEE HIVES WHERE REQUIRED.
5. USE OF LOW VIBRATION PRESSURE EXCAVATION WITHIN 10M OF WATERCOURSES.
6. DURING WORKS, THE MAIN COLLECTOR DRAINAGE NEAREST THE NATURAL WATERCOURSE WILL BE CLOSED FIRST AND SILT TRAPS WILL BE INSTALLED AS REQUIRED. THE DRAINAGE SHALL BE OPENED AT THE HARVEST POINT AND WORK SYSTEMATICALLY RESUMED TOWARDS THE WATERCOURSE.
7. SILT TRAPS WILL BE INSTALLED AT THE OUTFALLS OF EXISTING FORESTRY DRAINAGE DRAINAGE OF THE WORK AREA BEFORE ANY WORK COMMENCES.
8. SILT TRAPS WILL BE INSTALLED, MAINTAINED AND MONITORED FOR THE DURATION OF THE WORKS.
9. WORKS WILL BE SUSPENDED OR SCALED BACK PRIOR TO AND FOLLOWING PERIODS OF HEAVY WIND, WINDY WEATHER OR PROLONGED RAINFALL AND.
10. ALL OUTLETS OF THE COLLECTOR AND PERIMETER DRAINAGE WILL BE CLOSED.

STORAGE/CONTROLS

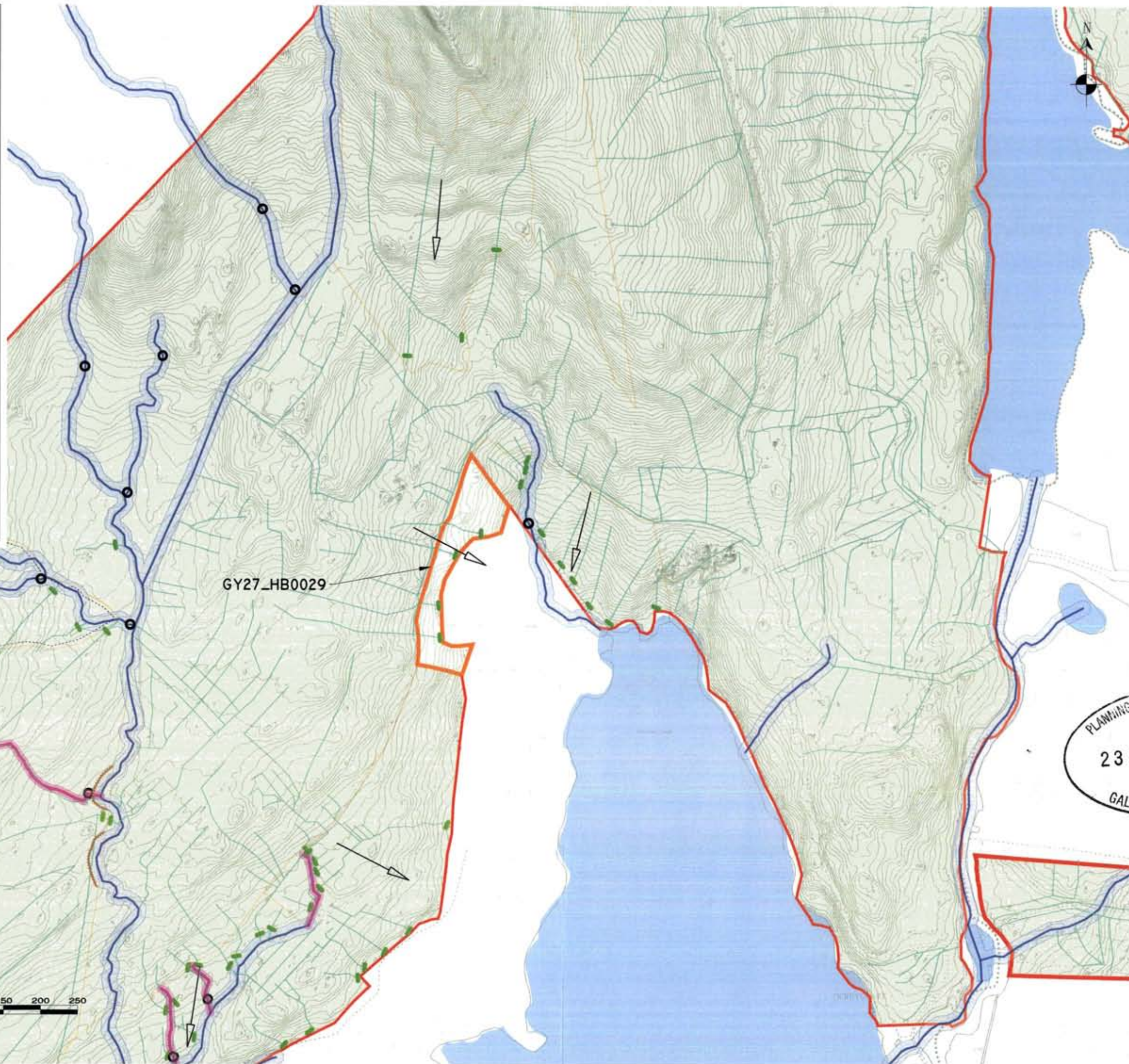
1. TOILET BODIES (TOILETS) WITH RESPECT TO THE STORAGE AND HANDLING OF FUELS, OILS AND EMERGENCY RESPONSE PROCEDURES WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
2. THERE WILL BE NO FUELS OR OILS STORED WITHIN 10M OF ANY WATERCOURSE OR WITHIN 5M OF ANY OTHER WATER FEATURE.
3. ALL ROAD-BOUND VEHICLES WILL BE RETAINED OFF SITE.
4. ON SITE REFUELLING WILL BE UNDERTAKEN USING A FUEL TENDER OR FUEL TENDER WITH SPILL KIT KEPT ON SITE FOR ACCIDENTAL SPILLS OR SPILLAGE.
5. ONLY DESIGNATED TRUCKS OPERATORS WILL BE AUTHORIZED TO REFUEL PLANT ON SITE.
6. FUEL AND OIL STORES INCLUDING TANKS AND DRUMS WILL BE REGULARLY INSPECTED FOR LEAKS AND SIGNS OF DAMAGE.
7. THE PLANT USED DURING CONSTRUCTION WILL BE REGULARLY INSPECTED FOR LEAKS AND SIGNS OF DAMAGE.
8. THE CRMP WILL BE AN EMERGENCY RESPONSE PLAN FOR THE CONSTRUCTION PHASE TO DEAL WITH ACCIDENTAL SPILLAGE.

IF WATER POLLUTION IS IDENTIFIED THE FOLLOWING STEPS SHOULD BE TAKEN:

1. STOP WORK IN THE IMMEDIATE AREA SHOULD BE STOPPED AND THE SOURCE OF THE POLLUTANT IDENTIFIED.

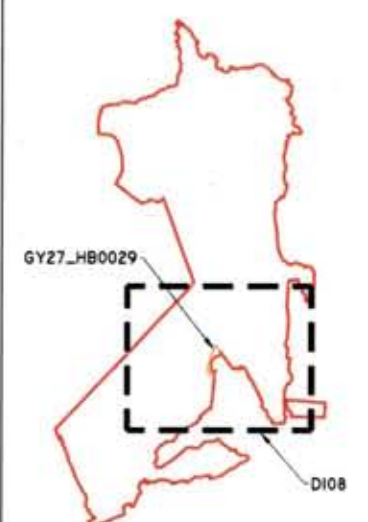
CONTAIN: THE SOURCE OF THE POLLUTANT SHOULD BE BUNDLED USING A SUITABLE METHOD. NATURAL WATERCOURSES SHOULD BE TEMPORARILY DIVERTED AROUND THE SOURCE OF POLLUTANT (IF APPROPRIATE).

NOTIFY: THE RELEVANT AUTHORITIES (SITE MANAGER / FARMER / NPWS / LOCAL AUTHORITY ETC.) SHOULD BE NOTIFIED IMMEDIATELY TO ENSURE THAT MEASURES CAN BE IMPLEMENTED IMMEDIATELY TO PROTECT FISHING AND OTHER SENSITIVE AREAS.



- LEGEND**
- STUDY AREA
 - HARVEST BLOCK BOUNDARIES
 - EPA RIVERS
 - 10M WATERCOURSE BUFFER
 - HARVEST DRAINS
 - EPA LAKES
 - RELEVANT WATERCOURSES
 - 5M RELEVANT WATERCOURSE BUFFER
 - TEMPORARY SILT TRAPS
 - DRAIN BLOCKING
 - DIRECTION OF RESTORATION WORKS
 - SILT FENCING
 - WORK ZONES <25HA

KEY PLAN



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23 FEB 2023 0060

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Title: GY27_HB0029 - CONSTRUCTION PHASE
DRAINAGE LAYOUT

Figure No: D108

Drawing No: P1616-0-0223-A3-D108-Rev A

Sheet Size: A3 Project No.: P1616-0

Scale: 1:5,000 (A3) Drawn By: GD

Date: 07/02/2023 Checked By: MG

WATER QUALITY PROTECTION NOTES

IT IS REQUIRED TO MAINTAIN A 10M BUFFER FROM THE DERRYLARE RIVER TO BLANKET BIRCH AND WET HEATH HABITATS. FOLLOWING FILLING AND RESTORATION MEASURES WILL BE IMPLEMENTED TO MAINTAIN BLANKET BIRCH. THE DRAIN RESTORATION MEASURES PROPOSED INCLUDE DRAIN BLOCKING, SURFACE BARRIERS AND REPROFILING.

ALL PROPOSED AND RESTORATION WORKS AT THE DERRYLARE RIVER WILL BE IN ACCORDANCE WITH THE BEST PRACTICE POINT SOURCE POLLUTION, POLICIES AND STRATEGIC GUIDANCE DOCUMENTS AS WELL AS COLLIS AND FOREST SERVICE GUIDANCE DOCUMENTS TO MAINTAIN MINIMAL, POTENTIAL, NEGATIVE EFFECTS ON THE LOCAL WOODLAND ECOSYSTEM.

DETAILED MITIGATION MEASURES FOR WATER QUALITY PROTECTION DURING THE RESTORATION WORKS ARE PRESENTED AT SECTIONS 9.3.2.3 AND 9.3.2.4 OF THE EIA. A SUMMARY OF THESE MITIGATION ARE INCLUDED HERE FOR REFERENCE.

DURING THE RESTORATION WORKS WATER QUALITY PROTECTION MEASURES WILL INCLUDE:

SEWAGE CONTROLS

1. TANK BOX TANKS (TBTs) WITH RESPECT TO THE IMPLEMENTATION OF SEWAGE CONTROLS MEASURES WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
2. ANALYTIC BUFFER ZONES, INCLUDING A 10M BUFFER TO WATERCOURSES AND A 5M BUFFER TO RELEVANT WATERCOURSES WILL BE IDENTIFIED.
3. IDENTIFICATION AND AVOIDANCE OF ANY DITCHES AND DRAINAGE AREAS WILL BE REQUIRED.
4. LAY OF AND RAILWAYS REQUIRED.
5. USE OF LOW VIBRATION EXCAVATION WITH ROPS TRUCKS TO THE AIR EXHAUSTED.
6. DURING DRAIN BLOCKING THE MAIN COLLECTOR DRAIN NEAREST THE NATURAL WATERCOURSE WILL BE BLOCKED FIRST AND SALT TRAPS WILL BE INSTALLED AS REQUIRED. THEN THE OPERATOR SHALL DRAIN WITH AT THE HARVEST POINT AND WORK SYSTEMATICALLY DOWNSTREAM TOWARDS THE WATERCOURSE.
7. SALT TRAPS WILL BE INSTALLED AT THE OUTFALL OF EXISTING FORESTRY DRAINAGE NETWORKS OF THE WORK AREAS BEFORE ANY WORK COMMENCES.
8. SALT TRAPS WILL BE INSTALLED, IDENTIFIED AND MAINTAINED FOR THE DURATION OF THE WORK.
9. WORKS WILL BE SUSPENDED OR SCALED BACK PRIOR TO AND FOLLOWING REMOVAL OF HEAVY, AIRBORNE WATER POLLUTANTS TRAPFALL, AND.
10. ALL OUTFALLS OF THE COLLECTOR AND PROPOSED DRAINAGE WILL BE BLOCKED.

ENVIRONMENTAL CONTROLS

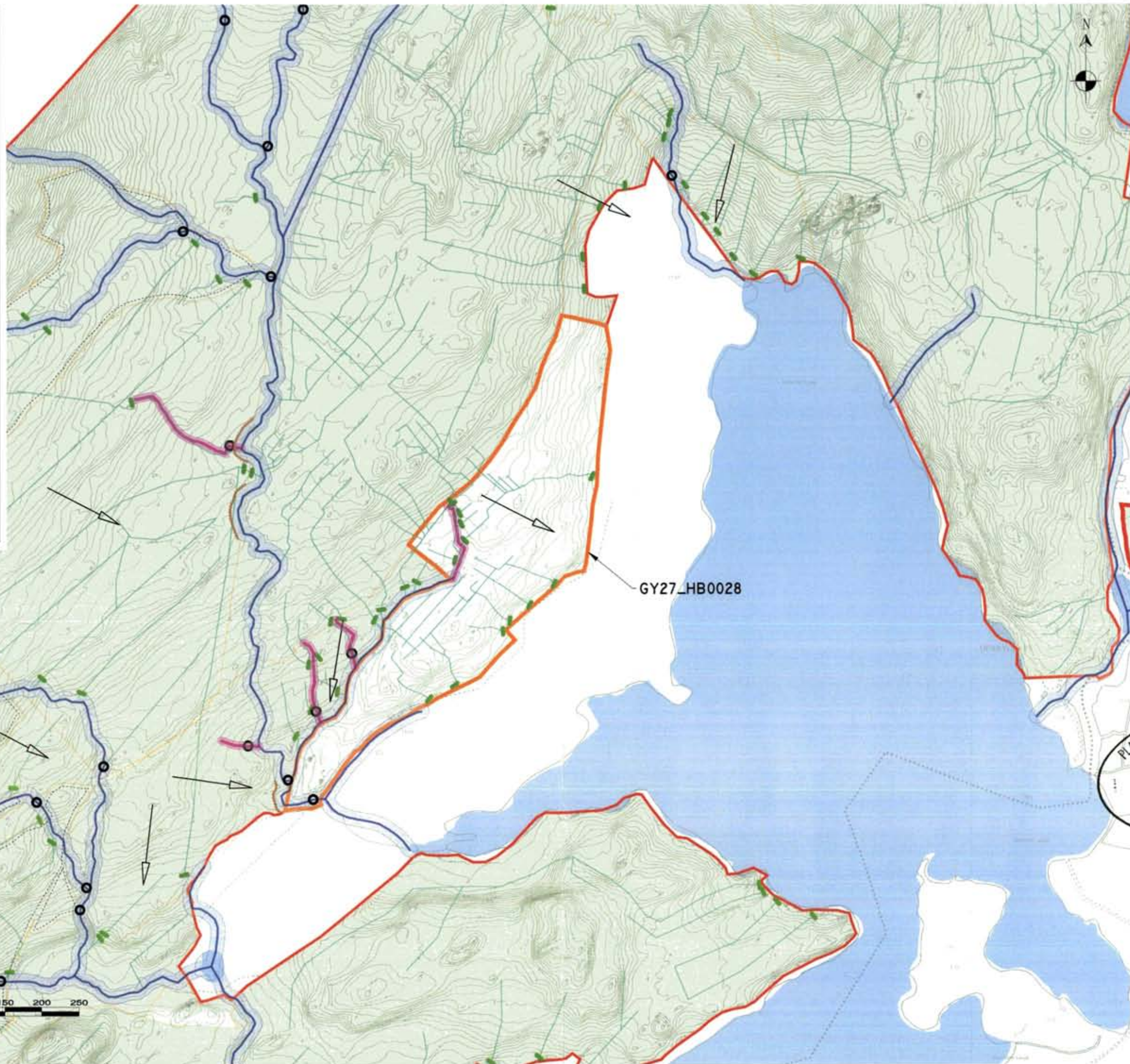
1. TANK BOX TANKS (TBTs) WITH RESPECT TO THE HERBICIDE AND PESTICIDE USE AND EMERGENCY RESPONSE PROCEDURES, WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
2. THERE WILL BE NO FIELDS OR HERBICIDES STORED WITHIN 50M OF AN AQUATIC ZONE OR WITHIN 20M OF ANY OTHER WATER FEATURE.
3. ALL ROAD-BOUND VEHICLES WILL BE REMOVED OFF SITE.
4. ON SITE REFUELLING WILL BE UNDERTAKEN USING A MOBILE DIESEL SHUTTLE BOWSER WITH SPILL KITS ADJACENT TO THE ACCIDENTAL LEAKAGE OR SPILLAGE.
5. ONLY DESIGNATED TRAINED OPERATIVES WILL BE AUTHORIZED TO REPAIR, PLANT OR SITE.
6. FUEL AND OIL STORES INCLUDING TANKS AND DRUMS WILL BE REGULARLY INSPECTED FOR LEAKS AND SIGNS OF DAMAGE.
7. THE PLANT USED DURING CONSTRUCTION WILL BE REGULARLY INSPECTED FOR LEAKS AND FIRED FOR PURPOSE, AND.
8. THE CEMP INCLUDES AN EMERGENCY RESPONSE PLAN FOR THE CONSTRUCTION PHASE TO DEAL WITH ACCIDENTAL SPILLAGE.

IF WATER POLLUTION IS IDENTIFIED THE FOLLOWING STEPS SHOULD BE TAKEN:

STOP: WORK IN THE IMMEDIATE AREA SHOULD BE STOPPED AND THE SOURCE OF THE POLLUTANT IDENTIFIED.

CONTAIN: THE SOURCE OF THE POLLUTANT SHOULD BE BLOCKED USING A SUITABLE METHOD. NATURAL WATERCOURSES SHOULD BE TEMPORARILY COVERED AROUND THE SOURCE OF POLLUTANT (IF APPROPRIATE).

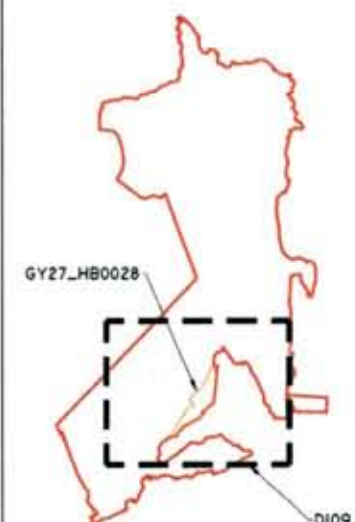
NOTIFY: THE RELEVANT AUTHORITIES (EPA Manager / Forestry / WFD / LOCAL AUTHORITY ETC.) SHOULD BE NOTIFIED IMMEDIATELY TO ENSURE THAT MEASURES CAN BE IMPLEMENTED APPROPRIATELY TO PROTECT FORELANDS AND OTHER SENSITIVE AREAS.



LEGEND

- STUDY AREA
- HARVEST BLOCK BOUNDARIES
- EPA RIVERS
- 10M WATERCOURSE BUFFER
- HARVEST DRAINS
- EPA LAKES
- RELEVANT WATERCOURSES
- 5M RELEVANT WATERCOURSE BUFFER
- TEMPORARY SILT TRAPS
- DRAIN BLOCKING
- DIRECTION OF RESTORATION WORKS
- SILT FENCING
- WORK ZONES <25HA

KEY PLAN



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Job: DERRYLARE WILD WESTERN
PEATLANDS PROJECT, CO. GALWAY

Title: GY27_HB0028 - CONSTRUCTION PHASE
DRAINAGE LAYOUT

Figure No: D109

Drawing No: P1616-0-0223-A3-D109-Rev A
 Sheet Size: A3 Project No.: P1616-0
 Scale: 1:5,000 (A3) Drawn By: GD
 Date: 07/02/2023 Checked By: MG

WATER QUALITY PROTECTION NOTES

It is proposed to restore 120ha of commercial forestry to blanket bog and wet heath habitats. Following the completion of the restoration measures, the main restoration measures proposed include drain blocking, surface treatment and re-vegetation.

All proposed restoration works at the Derryclare site will be in accordance with the Best Practice Forest Service Regulations, Policies and Strategic Guidance documents as well as County and Forest Service guidance documents to ensure minimal potential negative effects on the local hydrological environment.

Detailed mitigation measures for water quality protection during the restoration works are presented at sections 9.3.2.3 and 9.3.2.4 of the EIA. A summary of these mitigation measures is included here for reference.

During the restoration works water quality protection measures will include:

SEEDLING CONTROL

1. Tree Box Tails (TBTs) with respect to the implementation of seedling control measures will be completed at the start of restoration works within each harvest block.
2. Aquatic buffer zones, including a 10m buffer to watercourses and a 5m buffer to relevant watercourses will be identified.
3. Identification and avoidance of wet heath and wet areas will be undertaken.
4. Use of roll mats where required.
5. Use of low ground pressure excavator with wide tracks (2m or greater).
6. During drain blocking the main collector drains nearest the natural watercourse will be blocked first and silt traps will be installed as required. Then the operator shall move away at the nearest point and work systematically down the drain towards the watercourse.
7. Silt traps will be installed at the outfall of existing forestry drains down the length of the main drains before any works commence.
8. Silt fences will be installed, inspected and maintained for the duration of the works.
9. Roads will be suspended or sealed back prior to and following periods of heavy, intense and/or prolonged rainfall, and.
10. All outlets of the collector and sub-collector drains will be blocked.

CONSTRUCTION/OPERATION

1. Tree Box Tails (TBTs) with respect to the installation and implementation of, and emergency response procedures, will be completed at the start of restoration works within each harvest block.
2. There will be no fuel or materials stored within 10m of an aquatic zone or within 20m of any other water feature.
3. All road works carried out will be repaired off site.
4. On site parking will be undertaken using a mobile scum shield covered with spill kits kept on site for accidental leakage or spillage.
5. Only designated trained operators will be authorised to apply plant on site.
6. Fuel and oil stores including tanks and drums will be regularly inspected for leaks and signs of damage.
7. The plant used during construction will be regularly inspected for leaks and signs of damage.
8. The CEH will include an emergency response plan for the construction phase to deal with accidental spillage.

If water pollution is identified the following steps should be adhered to:

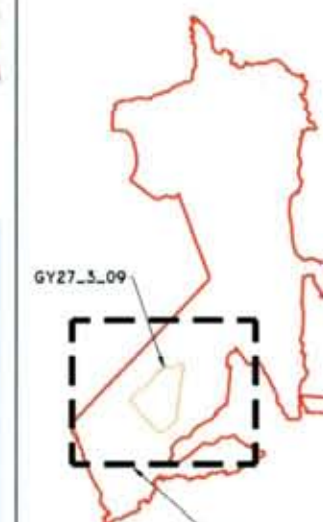
STOP Work in the immediate area should be stopped and the source of the pollutant identified.

CONTAIN The source of the pollutant should be removed using a suitable method. Pollutant materials should be immediately isolated around the source of pollutant (if appropriate).

NOTIFY The relevant authorities (EPA/County / Forestry / NPWS / Local Authority etc.) should be notified immediately to ensure that measures can be implemented immediately to protect fisheries and other sensitive areas.

- LEGEND**
- STUDY AREA
 - HARVEST BLOCK BOUNDARIES
 - EPA RIVERS
 - 10M WATERCOURSE BUFFER
 - HARVEST DRAINS
 - EPA LAKES
 - RELEVANT WATERCOURSES
 - 5M RELEVANT WATERCOURSE BUFFER
 - TEMPORARY SILT TRAPS
 - DRAIN BLOCKING
 - DIRECTION OF RESTORATION WORKS
 - SILT FENCING
 - WORK ZONES <25HA

KEY PLAN



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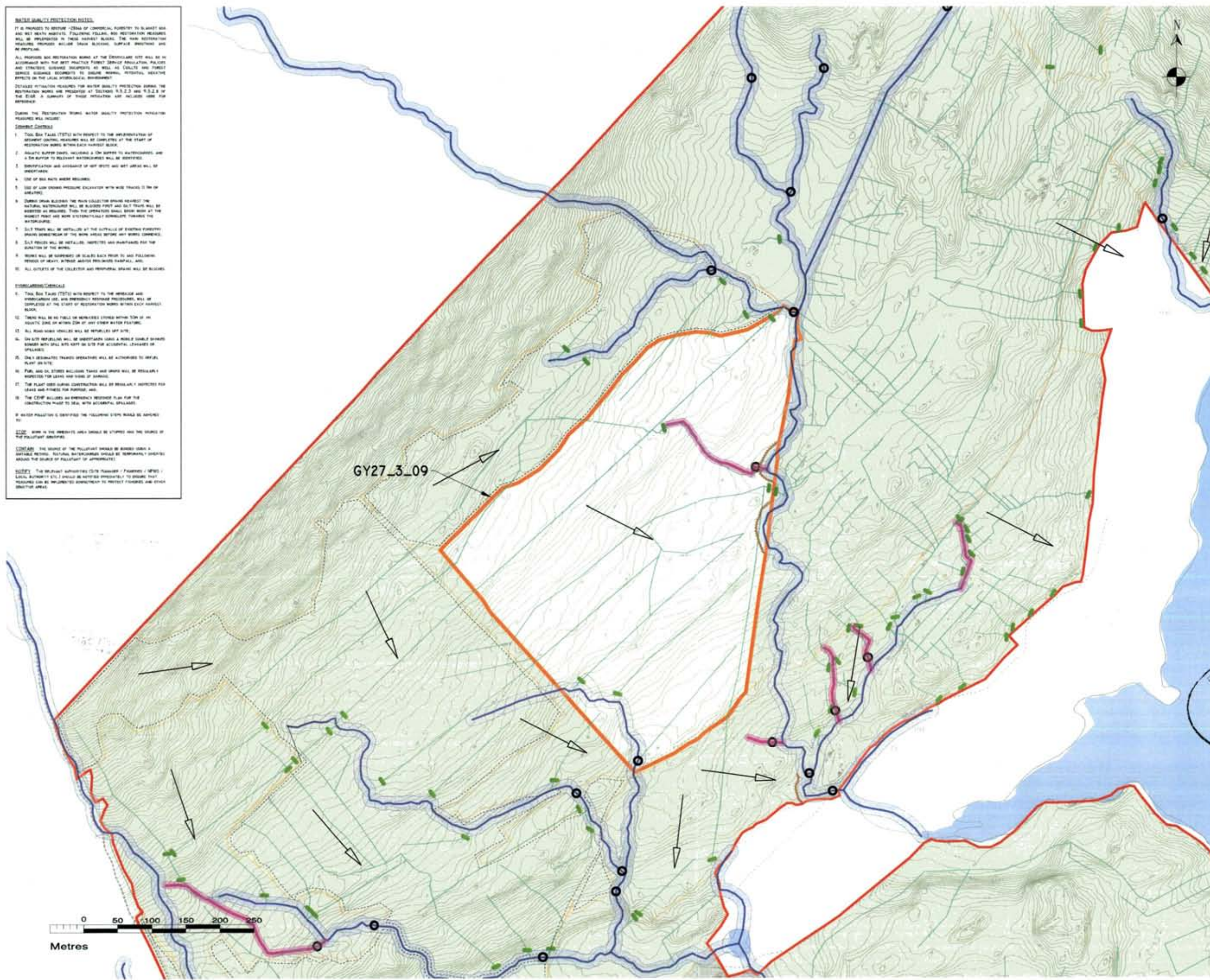
PLANNING & DEVELOPMENT SECTION

Date: 28 FEB 2023 00:00
Description: 0060
Checked: [Signature]
Signed: [Signature]

HYDRO ENVIRONMENTAL SERVICES

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Client:	COILLTE
Job:	DERRYCLARE WILD WESTERN PEATLANDS PROJECT, CO. GALWAY
Title:	GY27_3_09 - CONSTRUCTION PHASE DRAINAGE LAYOUT
Figure No:	D110
Drawing No:	P1616-0-0223-A3-D110-Rev A
Sheet Size:	A3
Project No.:	P1616-0
Scale:	1:5,000 (A3)
Drawn By:	GD
Date:	07/02/2023
Checked By:	MG



WATER QUALITY PROTECTION NOTES:

It is proposed to restore -TENS of commercial forestry to blanket bog and wet heath habitats. Following felling, the restoration measures will be implemented in three harvest blocks. The main restoration measures proposed include drain blocking, surface drainage and re-planting.

All proposed restoration works at the Derrylane site will be in accordance with the best practice Forest Service Regulation, Policies and Strategic Guidance documents as well as the Forest Service guidance documents to ensure minimal potential negative effects on the local hydrological environment.

Detailed mitigation measures for water quality protection during the restoration works are presented at sections 9.3.2.3 and 9.3.2.4 of the plan. A summary of these measures are included here for reference.

During the restoration works water quality protection measures will include:

General Controls:

1. This Best Practice (BTP) with respect to the implementation of sediment control measures will be completed at the start of restoration works within each harvest block.
2. Silt traps will be installed at the outlet of each harvest block and a 5m buffer to relevant watercourses will be observed.
3. Notification and avoidance of wet spots and wet areas will be observed.
4. Use of silt mats where required.
5. Use of low ground pressure excavator with wide tracks to the in wet areas.
6. During drain blocking the main collector drains nearest the natural watercourse will be blocked first and silt traps will be installed as required. Then the operator shall drain down at the highest point and work systematically downwards towards the watercourse.
7. Silt traps will be installed at the outlet of harvest blocks during the course of the work under any silt trap.
8. Silt traps will be installed, inspected and maintained for the duration of the work.
9. Roads will be supervised or closed prior to and following periods of heavy rain or prolonged rainfall, and.
10. All outlets of the collector and individual drains will be blocked.

Construction Controls:

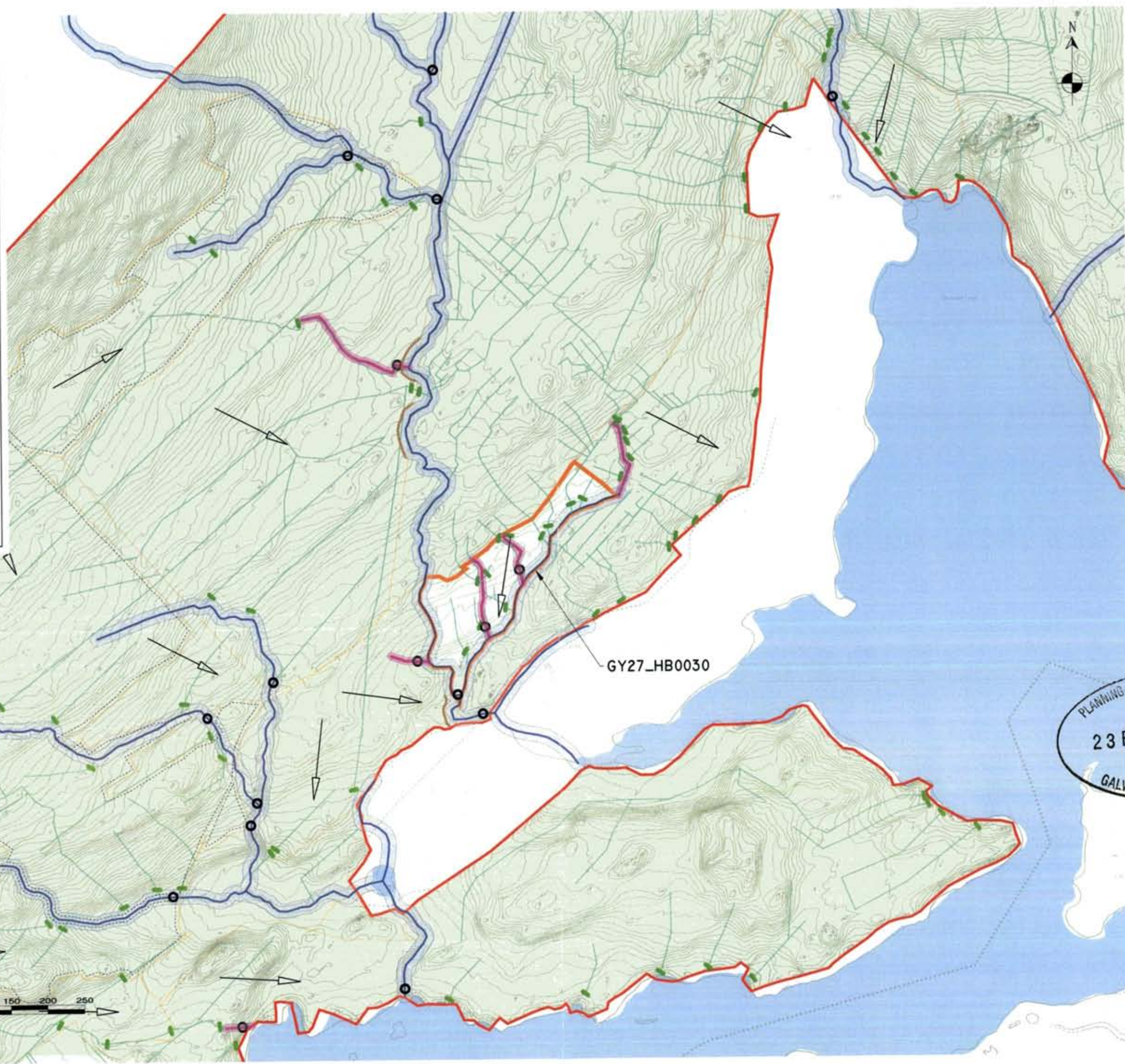
11. This Best Practice (BTP) with respect to the avoidance and minimisation of, and minimisation of, erosion measures will be completed at the start of restoration works within each harvest block.
12. There will be no fuel or materials stored within 50m of an aquatic zone or within 20m of any other water feature.
13. All road-going vehicles will be supervised off site.
14. On site refuelling will be undertaken using a mobile double handed pump with spill kits kept on site for accidental leakage or spillage.
15. Only designated trained operators will be authorised to repair plant on site.
16. Fuel and oil stored including tanks and drums will be regularly inspected for leaks and signs of damage.
17. The plant used during construction will be regularly inspected for leaks and signs of damage.
18. The client holds an emergency response plan for the construction phase to deal with accidental spillage.

If water pollution is identified the following steps would be applied:

STOP: Work in the immediate area should be stopped and the source of the pollution identified.

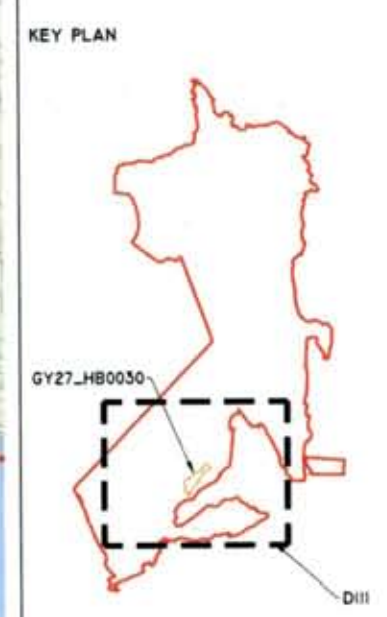
CONTAIN: The source of the pollution should be blocked using a suitable method. Natural watercourses should be temporarily diverted around the source of pollution if appropriate.

NOTICE: The relevant authorities (EPA Manager / Fisheries / HSE / Local Authority etc.) should be notified immediately to ensure that measures can be implemented downstream to protect fisheries and other sensitive areas.



LEGEND

- STUDY AREA
- HARVEST BLOCK BOUNDARIES
- EPA RIVERS
- 10M WATERCOURSE BUFFER
- HARVEST DRAINS
- EPA LAKES
- RELEVANT WATERCOURSES
- 5M RELEVANT WATERCOURSE BUFFER
- TEMPORARY SILT TRAPS
- DRAIN BLOCKING
- DIRECTION OF RESTORATION WORKS
- SILT FENCING
- WORK ZONES <25HA



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PLANNING & DEVELOPMENT SECTION

23 FEB 2023 0060

Date	Description	Checked	Signed
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Job: DERRYCLARE WILD WESTERN
PEATLANDS PROJECT, CO. GALWAY

Title: GY27_HB0030 - CONSTRUCTION PHASE
DRAINAGE LAYOUT

Figure No: DIII

Drawing No: P1616-0-0223-A3-D111-Rev A

Sheet Size: A3 **Project No.:** P1616-0

Scale: 1:5,000 (A3) **Drawn By:** GD

Date: 07/02/2023 **Checked By:** MG

WATER QUALITY PROTECTION MEASURES

IT IS PROPOSED TO RESTORE 1200ha OF COMMERCIAL FOREST TO BLAIST BAY AND WEST WATTS WATERSHED. FOLLOWING FLOODING, THE RESTORATION MEASURES WILL BE IMPLEMENTED IN THREE HARVEST BLOCKS. THE MAIN RESTORATION MEASURES PROPOSED INCLUDE DRAIN BLOCKING, SURFACE STRUCTURES AND SOIL PROTECTION.

ALL PROPOSED RESTORATION WORKS AT THE DERRYLARE SITE WILL BE IN ACCORDANCE WITH THE BEST PRACTICE FOREST SERVICE REGULATIONS, POLICIES AND STRATEGIC GUIDANCE DOCUMENTS AS WELL AS COLLITE AND FOREST SERVICE GUIDANCE DOCUMENTS TO ENSURE MINIMAL POTENTIAL NEGATIVE IMPACTS ON THE LOCAL HYDROLOGICAL ENVIRONMENT.

DETAILED ATTENTION REQUIRED FOR WATER QUALITY PROTECTION DURING THE RESTORATION WORKS ARE PRESENTED AT DECISION 9.3.2.3 AND 9.3.2.8 OF THE EIA. A SUMMARY OF THESE MEASURES ARE INCLUDED HERE FOR REFERENCE.

DURING THE RESTORATION WORKS WATER QUALITY PROTECTION MEASURES WILL INCLUDE:

SOIL PROTECTION

1. TOOL BOX TAKES (TBTs) WITH RESPECT TO THE IMPLEMENTATION OF SOIL PROTECTION MEASURES WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
2. ANTI-EROSION BARRIERS INCLUDING A 10M BUFFER TO WATERCOURSES AND A 5M BUFFER TO RELEVANT WATERCOURSES WILL BE INSTALLED.
3. IDENTIFICATION AND AVOIDANCE OF HOT SPOTS AND HOT AREAS WILL BE IMPLEMENTED.
4. USE OF SOIL MATS WHERE REQUIRED.
5. USE OF LOW IMPACT PRESSURE EXCAVATION WITH WIDE TRACKS (1.5m OR GREATER).
6. DURING DRAIN BLOCKING THE MAIN COLLECTION DRAIN NEAREST THE NATURAL WATERCOURSE WILL BE BLOCKED FIRST AND SOIL TRAPS WILL BE INSTALLED AS REQUIRED. THEN THE OPERATOR SHALL WORK UPSTREAM AT THE NEXT POINT AND WORK SYSTEMATICALLY DOWNSTREAM TOWARDS THE WATERCOURSE.
7. SOIL TRAPS WILL BE INSTALLED AT THE OUTFALL OF EXISTING FOREST DRAINS SOMEWHAT UPSTREAM OF THE WORK AREA BEFORE ANY WORK COMMENCES.
8. SOIL FENCES WILL BE INSTALLED, DIRECTED AND MAINTAINED FOR THE DURATION OF THE WORKS.
9. FENCES WILL BE SUPPLEMENTED OR REPLACED PRIOR TO ANY FOLLOWING PERIOD OF HEAVY WINTER WINDS OR PROLONGED RAINFALL, ETC.
10. ALL OUTLETS OF THE COLLECTION AND DRAINAGE SYSTEMS WILL BE BLOCKED.

ENVIRONMENTAL PROTECTION

1. TOOL BOX TAKES (TBTs) WITH RESPECT TO THE MONITORING AND IMPLEMENTATION OF THE ENVIRONMENTAL PROTECTION MEASURES WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
2. THERE WILL BE NO FILL OR WASTE STORED WITHIN 50m OF AN AQUIFIC ZONE OR WITHIN 20m OF ANY OTHER WATER FEATURE.
3. ALL ROAD-DRIVE DRIVERS WILL BE REINFORCED OFF SITE.
4. ON SITE REPAIRS WILL BE UNDERTAKEN USING A MOBILE MOBILE DRIVERS BARRIER WITH SPILL KITS KEPT ON SITE FOR ACCIDENTAL LEAKAGES OR SPILLAGES.
5. ON SITE DRIVERS TRAVEL OPERATIONS WILL BE AUTHORIZED TO REPAIR, REPAIR ON SITE.
6. FILL AND EXISTING MATERIALS AND DRIPS WILL BE REGULARLY MONITORED FOR LEAKS AND WASTE OF DROPS.
7. THE PLANT USED DURING CONSTRUCTION WILL BE REGULARLY MONITORED FOR LEAKS AND WASTE FOR PURPOSES.
8. THE CEMP INCLUDES AN EMERGENCY RESPONSE PLAN FOR THE CONSTRUCTION PHASE TO DEAL WITH ACCIDENTAL SPILLAGES.

IF WATER POLLUTION IS IDENTIFIED THE FOLLOWING STEPS SHOULD BE TAKEN:

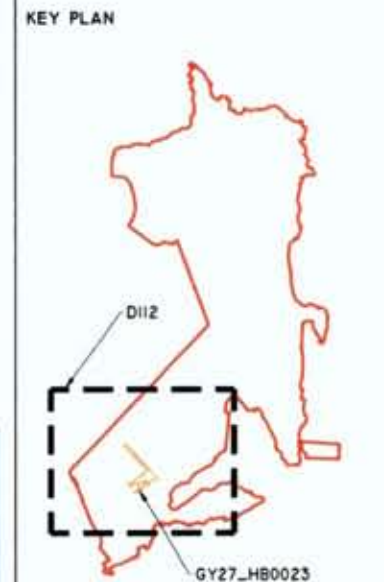
1. STOP WORK IN THE IMMEDIATE AREA WHERE THE SOURCE OF THE POLLUTANT IDENTIFIED.

2. CONTAIN: THE SOURCE OF THE POLLUTANT SHOULD BE BARRIED USING A VARIOUS METHOD. NATURAL WATERCOURSES SHOULD BE TEMPORARILY DIVERTED AROUND THE SOURCE OF POLLUTANT (IF APPROPRIATE).

3. NOTES: THE RELEVANT AUTHORITIES (EPA, HSE, FARMER / OWNER / LOCAL AUTHORITY ETC.) SHOULD BE NOTIFIED IMMEDIATELY TO ENSURE THAT POLLUTION CAN BE IMPLEMENTED CORRECTLY TO PROTECT FLOODING AND OTHER SENSITIVE AREAS.



- LEGEND**
- STUDY AREA
 - HARVEST BLOCK BOUNDARIES
 - EPA RIVERS
 - 10M WATERCOURSE BUFFER
 - HARVEST DRAINS
 - EPA LAKES
 - RELEVANT WATERCOURSES
 - 5M RELEVANT WATERCOURSE BUFFER
 - TEMPORARY SILT TRAPS
 - DRAIN BLOCKING
 - DIRECTION OF RESTORATION WORKS
 - SILT FENCING
 - WORK ZONES <25HA



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PLANNING & DEVELOPMENT SECTION

23 FEB 2023 0060

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Revisions

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Title: GY27_HB0023 - CONSTRUCTION PHASE
DRAINAGE LAYOUT

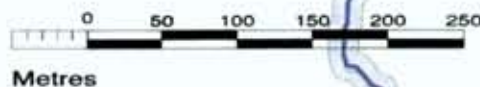
Figure No: D112

Drawing No: P1616-0-0223-A3-D112-Rev A

Sheet Size: A3 Project No: P1616-0

Scale: 1:5,000 (A3) Drawn By: GD

Date: 07/02/2023 Checked By: MG



WATER QUALITY PROTECTION NOTES:

It is intended to restore 'some of commercial forestry to blanket bog and wet heath habitats. Following follow-on restoration measures will be implemented in these harvest blocks. The main restoration measures proposed include drain blocking, surface drainage and re-forestation.

All proposed restoration works at the Derryclare site will be in accordance with the best practice Forest Service Regulation, Policies and Strategic Guidance documents as well as Coillte and Forest Service guidance documents to ensure minimal, potential, negative effects on the local hydrological environment.

DETAILED MITIGATION MEASURES FOR WATER QUALITY PROTECTION DURING THE RESTORATION WORKS ARE PRESENTED AT SECTIONS 9.5.2.3 AND 9.5.2.4 OF THE EIA. A SUMMARY OF THESE MEASURES AND ACTIONS FOR THE EIA IS PROVIDED.

DURING THE RESTORATION WORKS WATER QUALITY PROTECTION MEASURES WILL INCLUDE:

General Controls

1. TOOL BOX TAKE (TBT) WITH RESPECT TO THE IMPLEMENTATION OF EROSION CONTROL MEASURES WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
2. AGRICULTURAL SUPPLY DRAIN, INCLUDING A 10M BUFFER TO WATERCOURSE, AND A 5M BUFFER TO RELEVANT WATERCOURSES WILL BE IDENTIFIED.
3. IDENTIFICATION AND AVOIDANCE OF HOT SPOTS AND HOT SPOTS WILL BE AVOIDED.
4. USE OF SOIL MATS WHERE REQUIRED.
5. USE OF SOIL DRIVING PRESSURE EXCEEDED WITHIN 10M OF (OR) EXCEEDED.
6. DRAIN BLOCKING: THE MAIN COLLECTION DRAIN NEAREST THE NATURAL WATERCOURSE WILL BE BLOCKED FIRST AND SOIL TRAPS WILL BE INSTALLED AS REQUIRED. THEN THE OPERATOR SHALL WORK FROM THE HARVEST POINT AND WORK SYSTEMATICALLY DOWNSTREAM TOWARDS THE WATERCOURSE.
7. SOIL TRAPS WILL BE INSTALLED AT THE OUTFALL OF EXISTING FOREST DRAINAGE DRAINAGE OF THE WORK AREA BEFORE ANY WORK COMMENCES.
8. SOIL TRAPS WILL BE INSTALLED, INSPECTED AND MAINTAINED FOR THE DURATION OF THE WORK.
9. WORKS WILL BE SUSPENDED OR SCALED BACK PRIOR TO AND FOLLOWING PERIODS OF HEAVY, INTENSE AND/OR PROLONGED RAINFALL, AND.
10. ALL OUTFALLS OF THE COLLECTION AND PERMANENT DRAINAGE WILL BE BLOCKED.

STORAGE/STORAGE/STORAGE

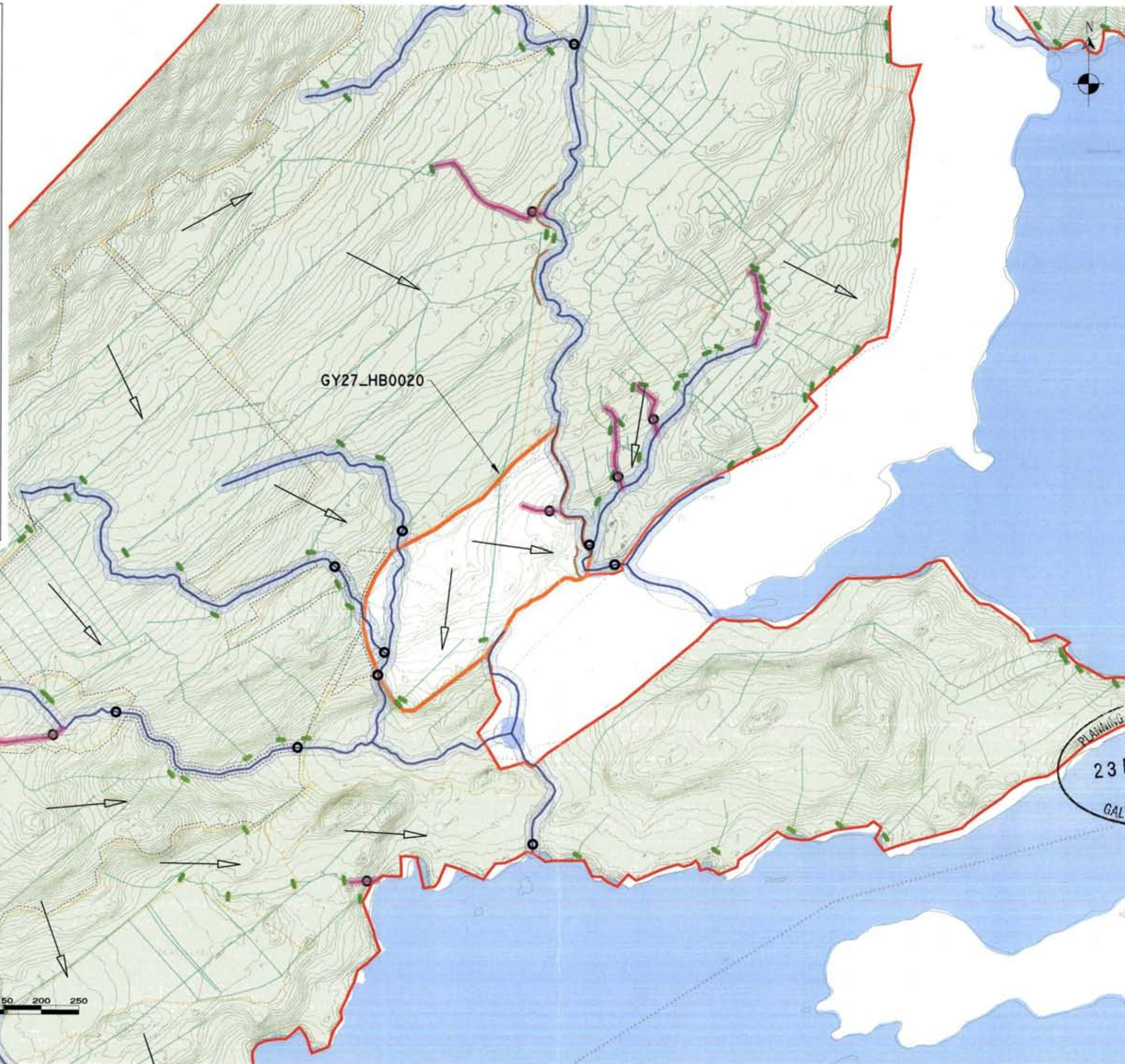
11. TOOL BOX TAKE (TBT) WITH RESPECT TO THE AVOIDANCE OF EROSION AND EROSION CONTROL MEASURES WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
12. THERE SHALL BE NO FUEL OR MATERIALS STORED WITHIN 10M OF AN AQUATIC ZONE OR WITHIN 20M OF ANY OTHER WATER FEATURE.
13. ALL ROAD-BUILDING VEHICLES WILL BE REPAIRED OFF-SITE.
14. ON-SITE REFUELLING WILL BE UNDERTAKEN USING A REMOTE FUEL TANKER BARGE WITH SPILL KITS KEPT ON-SITE FOR ACCIDENTAL SPILLS OR SPILLAGE.
15. ONLY DESIGNATED TRAFFIC OPERATORS WILL BE AUTHORIZED TO DRIVE PLANT ON-SITE.
16. FUEL AND OIL STORES INCLUDING TANKS AND DRUMS WILL BE REGULARLY INSPECTED FOR LEAKS AND SIGNS OF DAMAGE.
17. THE PLANT USED DURING CONSTRUCTION WILL BE REGULARLY INSPECTED FOR LEAKS AND SIGNS OF DAMAGE.
18. THE CEMP INCLUDES AN EMERGENCY RESPONSE PLAN FOR THE CONSTRUCTION PHASE TO DEAL WITH ACCIDENTAL SPILLAGE.

IF WATER POLLUTION IS IDENTIFIED THE FOLLOWING STEPS SHOULD BE ADOPTED:

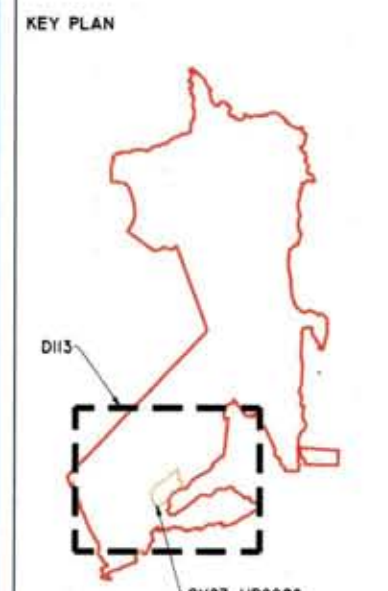
STOP: WORK IN THE IMMEDIATE AREA SHOULD BE STOPPED AND THE SOURCE OF THE POLLUTANT IDENTIFIED.

CONTAIN: THE SOURCE OF THE POLLUTANT SHOULD BE STOPPED USING A SUITABLE METHOD. NATURAL WATERCOURSES SHOULD BE TEMPORARILY DIVERTED AROUND THE SOURCE OF POLLUTANT IF APPROPRIATE.

NOTES: THE RELEVANT AUTHORITIES (SITE MANAGER / FORESTER / NPWS / LOCAL AUTHORITY ETC.) SHOULD BE INFORMED IMMEDIATELY TO ENSURE THAT MEASURES CAN BE IMPLEMENTED IMMEDIATELY TO PROTECT FISHING AND OTHER SENSITIVE AREAS.



- LEGEND**
- STUDY AREA
 - HARVEST BLOCK BOUNDARIES
 - EPA RIVERS
 - 10M WATERCOURSE BUFFER
 - HARVEST DRAINS
 - EPA LAKES
 - RELEVANT WATERCOURSES
 - 5M RELEVANT WATERCOURSE BUFFER
 - TEMPORARY SILT TRAPS
 - DRAIN BLOCKING
 - DIRECTION OF RESTORATION WORKS
 - SILT FENCING
 - WORK ZONES <25HA



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Title:	GY27_HB0020 - CONSTRUCTION PHASE DRAINAGE LAYOUT
Figure No:	D113
Drawing No:	P1616-0-0223-A3-D113-Rev A
Sheet Size:	A3
Scale:	1:5,000 (A3)
Date:	07/02/2023
Project No.:	P1616-0
Drawn By:	GD
Checked By:	MG

WATER QUALITY PROTECTION NOTES

IT IS PROPOSED TO RESTORE 1200m OF COMMERCIAL FOREST TO BLANKET BIRCH AND RED REIN BIRCH. FOLLOWING FELLING, THE RESTORATION MEASURES WILL BE IMPLEMENTED IN THESE HARVEST BLOCKS. THE MAIN RESTORATION MEASURES PROPOSED INCLUDE DRAIN BLOCKING, SURFACE SLOTTING AND RE-PROFILING.

ALL PROPOSED AND RESTORATION WORKS AT THE DERRYCLARE WLD WILL BE IN ACCORDANCE WITH THE BEST PRACTICE FOREST SERVICE GUIDANCE, POLICES AND STRATEGIC GUIDANCE DOCUMENTS AS WELL AS LOCALITY AND FOREST SERVICE GUIDANCE DOCUMENTS TO ENSURE MINIMAL POTENTIAL NEGATIVE EFFECTS ON THE LOCAL HYDROLOGICAL ENVIRONMENT.

DETAILED MITIGATION MEASURES FOR WATER QUALITY PROTECTION DURING THE RESTORATION WORKS ARE PRESENTED AT SECTIONS 9.3.2.3 AND 9.3.2.4 OF THE EIA. A SUMMARY OF THESE MITIGATION MEASURES IS GIVEN FOR REFERENCE.

DURING THE RESTORATION WORKS WATER QUALITY PROTECTION MEASURES WILL INCLUDE:

SOILWORK CONTROLS

1. THE SOIL TREATMENT WITH RESPECT TO THE IMPLEMENTATION OF SOILWORK CONTROLS MEASURES WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
2. AGRICULTURAL BUFFER STRIPS, INCLUDING A 10M BUFFER TO WATERCOURSES, AND A 5M BUFFER TO RELEVANT WATERCOURSES WILL BE IDENTIFIED.
3. SLOTTING AND AVOIDANCE OF NEW DITCHES AND NEW AREAS WILL BE AVOIDED.
4. USE OF NEW MATS WHERE REQUIRED.
5. USE OF LOW VIBRATION EXCAVATION WITH WIDE TRACKS (5m OR GREATER).
6. DURING DRAIN BLOCKING THE MAIN COLLECTOR DRAINAGE BEHIND THE NATURAL WATERCOURSE WILL BE BLOCKED FIRST AND SALT TRAPS WILL BE INSTALLED AS REQUIRED. THEN THE OPERATOR SHALL WORK UP AT THE HARVEST POINT AND WORK SYSTEMATICALLY DOWNWARDS TOWARDS THE WATERCOURSE.
7. SALT TRAPS WILL BE INSTALLED AT THE OUTFALLS OF EXISTING FORESTRY DRAINAGE SYSTEMS OF THE HARVEST AREAS BEFORE ANY WORK COMMENCES.
8. SALT TRAPS WILL BE INSTALLED, INSPECTED AND MAINTAINED FOR THE DURATION OF THE WORKS.
9. DITCHES WILL BE STOPPED OR SEALED BACK PRIOR TO AND FOLLOWING PERIODS OF HEAVY RAINFALL AND/OR PROLONGED RAINFALL. AND
10. ALL OUTFALLS OF THE COLLECTOR AND PROPOSED DRAINAGE WILL BE BLOCKED.

STORAGE/STORAGE/STORAGE

11. THE SOIL TREATMENT WITH RESPECT TO THE HARVEST AND RE-PROFILING WORKS, INCLUDING RE-PROFILING MEASURES, WILL BE COMPLETED AT THE START OF RESTORATION WORKS WITHIN EACH HARVEST BLOCK.
12. THERE WILL BE NO FILL OR RE-PROFILING WORKS WITHIN 10m OF AN ADJACENT DITCH OR WITHIN 5m OF ANY OTHER WATER FEATURE.
13. ALL ROAD WORKS WILL BE COMPLETED OFF SITE.
14. ON SITE RE-PROFILING WILL BE UNDERTAKEN USING A MOBILE DITCH GRADER EQUIPPED WITH SPILL KITS ON SITE FOR ACCIDENTAL SPILLS OR SPILLAGE.
15. ONLY DESIGNATED TRACTORS OPERATORS WILL BE AUTHORIZED TO REPAIR PLANT ON SITE.
16. FUEL AND OIL STORES INCLUDING TANKS AND DRUMS WILL BE REGULARLY INSPECTED FOR LEAKS AND SIGNS OF DAMAGE.
17. THE PLANT USED DURING CONSTRUCTION WILL BE REGULARLY INSPECTED FOR LEAKS AND SIGNS OF DAMAGE.
18. THE CEMP INCLUDES AN EMERGENCY RESPONSE PLAN FOR THE CONSTRUCTION PHASE TO DEAL WITH ACCIDENTAL SPILLAGE.

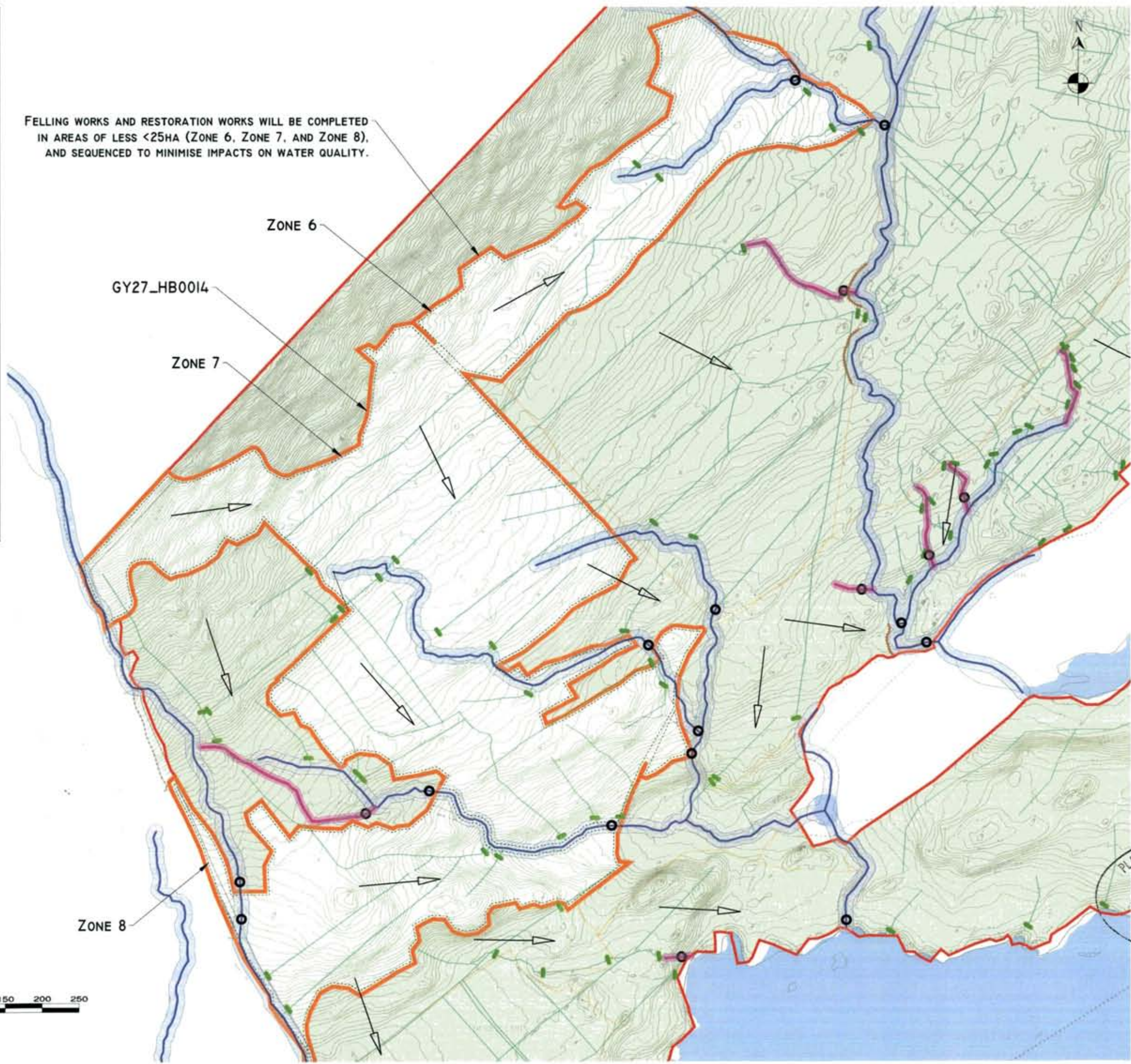
IF WATER POLLUTION IS IDENTIFIED THE FOLLOWING STEPS WILL BE TAKEN:

STOP: WORK IN THE IMMEDIATE AREA SHOULD BE STOPPED AND THE SOURCE OF THE POLLUTION IDENTIFIED.

CONTAIN: THE SOURCE OF THE POLLUTANT SHOULD BE STOPPED USING A SUITABLE METHOD. POLLUTANT MATERIALS SHOULD BE TEMPORARILY STORED AWAY FROM THE SOURCE OF POLLUTION (IF APPROPRIATE).

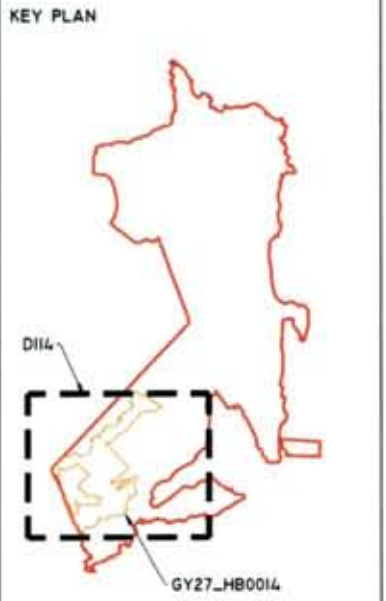
NOTIFY: THE RELEVANT AUTHORITIES (EPA/HAZARD / FIRE / RIVER / LOCAL AUTHORITY ETC) SHOULD BE NOTIFIED IMMEDIATELY TO ENSURE THAT MEASURES CAN BE IMPLEMENTED IMMEDIATELY TO PREVENT FURTHER AND OTHER DAMAGE TO THE AREA.

FELLING WORKS AND RESTORATION WORKS WILL BE COMPLETED IN AREAS OF LESS <25HA (ZONE 6, ZONE 7, AND ZONE 8), AND SEQUENCED TO MINIMISE IMPACTS ON WATER QUALITY.



LEGEND

- STUDY AREA
- HARVEST BLOCK BOUNDARIES
- EPA RIVERS
- 10M WATERCOURSE BUFFER
- HARVEST DRAINS
- EPA LAKES
- RELEVANT WATERCOURSES
- 5M RELEVANT WATERCOURSE BUFFER
- TEMPORARY SILT TRAPS
- DRAIN BLOCKING
- DIRECTION OF RESTORATION WORKS
- SILT FENCING
- WORK ZONES <25HA



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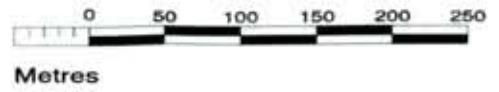
Client: **COILLTE**

Date: **23 FEB 2023**

Job: **DERRYCLARE WILD WESTERN PEATLANDS PROJECT, Co. GALWAY**

Title: **GY27_HB0014 CONSTRUCTION PHASE DRAINAGE LAYOUT**

Figure No:	D114
Drawing No:	P1616-0-0223-A3-D114-Rev A
Sheet Size:	A3
Scale:	1:5,000 (A3)
Date:	07/02/2023
Project No.:	P1616-0
Drawn By:	GD
Checked By:	MG



WATER QUALITY PROTECTION NOTES:

It is proposed to remove 100m of commercial forestry to blanket bog and wet heath habitats. Following removal, the restoration measures will be implemented in these harvest blocks. The restoration measures proposed include drain blocking, surface bunding and re-profiling.

All proposed restoration works at the Derryclare site will be in accordance with the best practice Forest Service Regulation, Policies and Procedures. Measures designed to ensure minimal potential negative effects on the local hydrological environment.

Detailed mitigation measures for water quality protection during the restoration works are presented at Sections 9.5.2.3 and 9.5.2.4 of the EIA. A summary of these measures are included here for reference.

During the restoration works water quality protection measures will include:

Current Controls

1. Top Soil Tails (TSTs) with respect to the implementation of current controls measures will be completed at the start of restoration works within each harvest block.
2. Surface bunding, including a 10m buffer to watercourses, and a 5m buffer to relevant watercourses will be installed.
3. Identification and avoidance of wet heath and wet heath areas will be undertaken.
4. Use of low impact machinery will be required.
5. Use of low impact machinery with wide tracks (3m or more).
6. Surface bunding: The main collector drain nearest the natural watercourse will be blocked first and silt traps will be installed as required. Then the operators shall work north at the harvest point and work systematically down-drain towards the watercourse.
7. Silt traps will be installed at the outlets of existing forestry drain networks of the harvest areas before any work commences.
8. Silt fences will be installed, inspected and maintained for the duration of the works.
9. Works will be supervised or scaled back prior to and following periods of heavy rainfall and/or prolonged rainfall, and.
10. All outlets of the collector and peripheral drains will be blocked.

Contingency Measures

11. Top Soil Tails (TSTs) with respect to the measures and contingency measures will be completed at the start of restoration works within each harvest block.
12. There will be no fields or heathlands stored within 50m of any harvest zone or within 10m of any other water feature.
13. All roadways should be well maintained off-site.
14. On-site spillage will be undertaken using a mobile double sided barrier with spill kits kept on site for accidental spillage or spillage.
15. Only designated trained operators will be authorised to operate plant on-site.
16. Fuel and oil storage including tanks and drums will be regularly inspected for leaks and signs of damage.
17. The plant used during construction will be regularly inspected for leaks and fitted for purpose, and.
18. The client includes an emergency response plan for the construction phase to deal with accidental spillage.

If water pollution is identified the following steps should be adhered to:

1. Stop work in the immediate area should be stopped and the source of the pollutant identified.

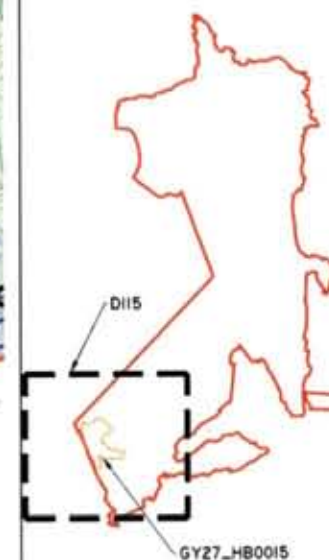
2. Contain: The source of the pollutant should be secured using a suitable method. Natural watercourses should be temporarily diverted around the source of pollutant if appropriate.

3. Notify: The relevant authorities (Site Manager / Foreman / NPWS / Local Authority etc.) should be notified immediately to ensure that measures can be implemented immediately to protect fisheries and other sensitive areas.

GY27_HB0015

- LEGEND**
- STUDY AREA
 - HARVEST BLOCK BOUNDARIES
 - EPA RIVERS
 - 10M WATERCOURSE BUFFER
 - HARVEST DRAIN
 - EPA LAKES
 - RELEVANT WATERCOURSES
 - 5M RELEVANT WATERCOURSE BUFFER
 - TEMPORARY SILT TRAPS
 - DRAIN BLOCKING
 - SILT FENCING
 - WORK ZONES <25HA

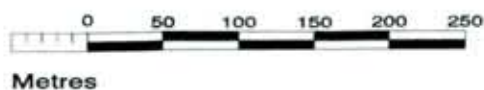
KEY PLAN



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PLANNING & DEVELOPMENT SECTION 23 FEB 2023 00:00 GALWAY COUNTY COUNCIL		Date	Description	Chkd	Signed
		Revision			
HYDRO-ENVIRONMENTAL SERVICES Tel: +353 (0) 98-44121 Fax: +353 (0) 98-44244 Email: info@hydroenvironmental.ie Web: www.hydroenvironmental.ie		Client: COILLTE Job: DERRYCLARE WILD WESTERN PEATLANDS PROJECT, Co. GALWAY Title: GY27_HB0015 - CONSTRUCTION PHASE DRAINAGE LAYOUT Figure No: D115 Drawing No: P1616-0-0223-A3-D115-Rev A Sheet Size: A3 Project No: P1616-0 Scale: 1:5,000 (A3) Drawn By: GD Date: 07/02/2023 Checked By: MG			



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Source: California

1. TOOL BOX (ITTE) WITH RESPECT TO THE IMPLEMENTATION OF
ADJUSTMENT CONTROL MEASURES WILL BE COMPLETED AT THE START OF
RESTORATION WORKING WITH EACH NAMED RISK.
2. AQUATIC SUPPLY TOWNS, INCLUDING A SH SHUTTER TO WATERPROOFING AND
A SH SHUTTER TO RESISTANT WATERPROOFING WILL BE COMPLETED.
3. IDENTIFICATION AND ANALYSIS OF HOT SPOTS AND HOT SPOTS WILL BE
IDENTIFIED.
4. USE OF RISK DATA WHERE REQUIRED.
5. USE OF LOW RISK PRESSURE EXTRACTOR WITH RISK TRACKS TO BE
CREATED.
6. DURING BOMB-BLOCKING THE RISK COLLECTOR SHOULD BE USED TO
IDENTIFY AND ANALYZE THE RISK COLLECTOR AND RISK TRACKS WILL
BE COMPLETED AS REQUIRED. THE OPERATOR SHOULD BE AWARE OF THE
RISK TRACKS AND RISK TRACKS WILL BE COMPLETED AS REQUIRED.
7. RISK TRACKS WILL BE IDENTIFIED AT THE OUTLINES OF EXISTING FACILITY
DURING BOMB-BLOCKING OF THE RISK TRACKS BEFORE ANY RISK TRACKS
COMPLETED.
8. RISK TRACKS WILL BE IDENTIFIED, IDENTIFIED AND IDENTIFIED FOR
THE DURATION OF THE RISK TRACKS.
9. RISK TRACKS WILL BE IDENTIFIED ON RISK TRACKS PRIOR TO AND FOLLOWING
PERIODS OF HEAVY RISK TRACKS DURING RISK TRACKS AND
IDENTIFIED.
10. ALL OUTLETS OF THE COLLECTOR AND RISK TRACKS WILL BE IDENTIFIED

1. THE BIDDING TEAM (S) HAS TO IDENTIFY THE PROPOSED AND PROPOSED ALTERNATE, AND IMMEDIATELY PROPOSED PROPOSER, WILL BE REQUIRED TO PROVIDE THE LIST OF ASSOCIATIONS WITHIN EACH ASSIGNED BID.
2. THERE WILL BE NO FIELDS OR MEMORANDUMS WITHIN 50M OF AN AERIAL ZONE OR WITHIN 20M OF ANY OTHER WATER FIELD.
3. ALL ROAD-SIDE VEHICLES WILL BE REMOVED OFF SITE.
4. ON-ROUTE REVEALING WILL BE IMMEDIATELY DONE AS PUBLIC SHOULD KNOW WHERE SPILL SITES OFF ON SITE FOR ACCIDENTAL CLEANUPS OF SPILLS.
5. ONLY DESIGNATED TRUCKS OPERATING WILL BE ALLOWED TO REPAIR.
6. FUEL, AND OIL, STORES INCLUDING TANKS AND DRUMS WILL BE REGULARLY INSPECTED FOR LEAKS AND OILS OF OILS.
7. THE PLANT OILS DURING CONSTRUCTION WILL BE REGULARLY INSPECTED FOR LEAKS AND FUTURE FUEL PURPOSE, AND.
8. THE CDR WILL REMAIN AN IMMEDIATE RESPONSE PLAN FOR THE CONSTRUCTION PHASE TO DEAL WITH ACCIDENTAL SPILLS.

IF WATER POLLUTION IS OBSERVED THE FOLLOWING STEPS SHOULD BE TAKEN:

STUDY - WORK IN THE IMMEDIATE AREA SHOULD BE STOPPED AND THE SOURCE OF THE POLLUTANT IDENTIFIED.

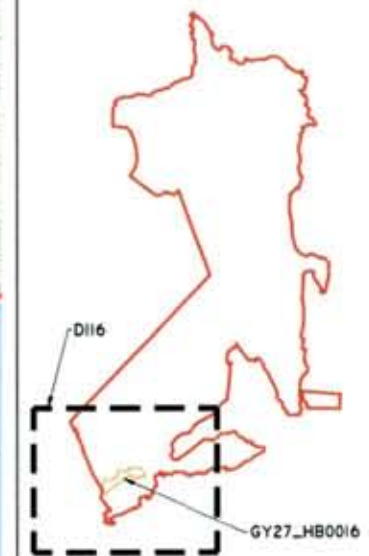
NOTE: THE SOURCE OF THE POLLUTANT SHOULD BE MARKED USING A
SUITABLE METHOD. NATURAL WATERBODIES SHOULD BE NORMALLY IDENTIFIED
AROUND THE SOURCE OF POLLUTANT (IF APPROPRIATE).

NOTES: The relevant authorities (City Manager / Mayor / MP/ Local Authority etc.) should be notified appropriately to ensure that measures can be implemented consistent to protect fisheries and other sensitive areas.

LEGEND

-  STUDY AREA
-  HARVEST BLOCK BOUNDARIES
-  EPA RIVERS
-  10M WATERCOURSE BUFFER
-  HARVEST DRAINS
-  EPA LAKES
-  RELEVANT WATERCOURSES
-  5M RELEVANT WATERCOURSE BUFFER
-  TEMPORARY SILT TRAPS
-  DRAIN BLOCKING
-  DIRECTION OF RESTORATION WORKS
-  SILT FENCING
-  WORK ZONES <25HA

KEY PLAN



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COILLTE

Job: DERRYCLARE WILD WESTERN
PEATLANDS PROJECT, CO. GALWAY

Title: GY27_HB0016 - CONSTRUCTION PHASE
DRAINAGE LAYOUT

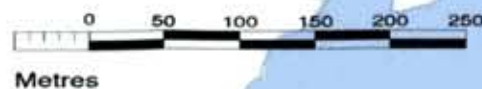
Figure No: 0116

Drawing No: P1616-0-0223-A3-D116-Rev A

Sheet Size: A3	Project No.: P1616-0
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Scale: 1:5,000 (A3)	Drawn By: GD
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Date: 07/02/2023	Checked By: MG
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WATER QUALITY PROTECTION NOTES:

It is proposed to restore 100% of commercial forestry to blanket bog and wet heath habitats. Following felling, soil restoration measures will be implemented in these harvest blocks. The main restoration measures proposed include drain blocking, surface smoothing and re-profile.

All proposed soil restoration works at the Corribagh site will be in accordance with the best practice Forest Service Pollution Policy and (Forest Service) Discharge Policy as well as the Forest Service Discharge Policy to ensure minimal potential adverse effects on the local hydrological environment.

Details mitigation measures for water quality protection during the restoration works are presented at Sections 9.3.2.2 and 9.3.2.3 of the EIA. A summary of these measures and relevant time for reference.

During the restoration works water quality protection measures will include:

General Controls

1. Tool Box Talks (TTTs) with respect to the implementation of sediment control measures will be completed at the start of restoration works within each harvest block.
2. Silt fences, silt traps, silt curtains and silt traps will be installed at relevant watercourses.
3. Sedimentation and avoidance of silt spots and silt areas will be prevented.
4. Use of silt mats where required.
5. Use of low pressure excavation with wide tracks to the ground surface.
6. During drain blocking the main collector drain nearest the natural watercourse will be blocked first and silt traps will be installed as required. Then the operators shall work at the harvest point and work systematically down-drain towards the watercourse.
7. Silt traps will be installed at the outlets of peatland forestry drains downstream of the work areas before any work commences.
8. Silt fences will be installed, inspected and maintained for the duration of the work.
9. Works will be suspended or slowed down prior to any following period of heavy rain or after heavy rain.
10. All outlets of the collector and peripheral drains will be blocked.

Environmental Controls

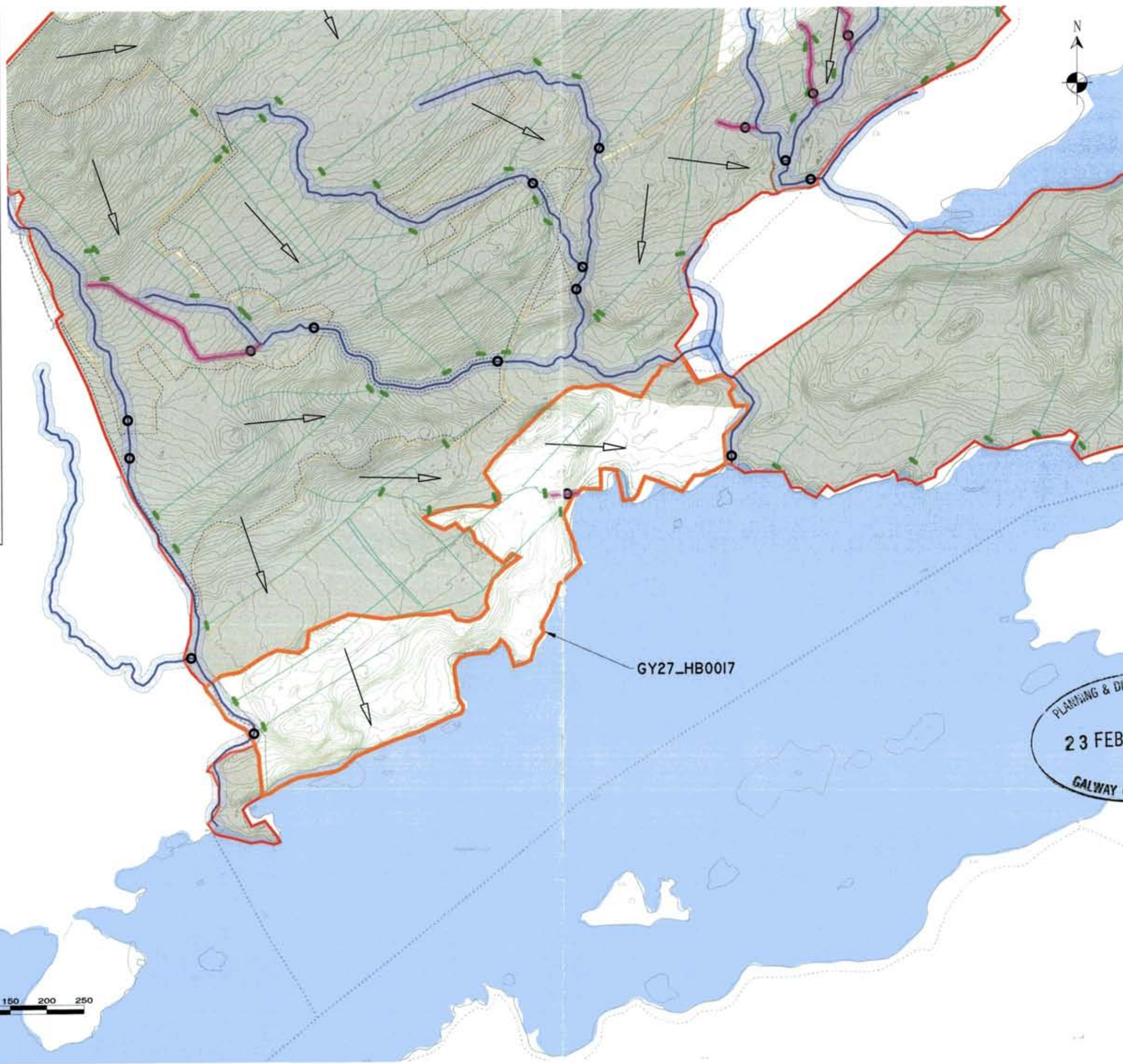
11. Tool Box Talks (TTTs) with respect to the avoidance and minimisation of and emergency response procedures, will be completed at the start of restoration works within each harvest block.
12. There will be no felling or removal of trees within 10m of any watercourse or within 50m of any other water feature.
13. All road-going vehicles will be restricted off site.
14. On site refuelling will be undertaken using a mobile double shielded tanker with spill kits kept on site for accidental spillages or spillages.
15. Only designated trained operators will be authorised to operate plant on site.
16. Fuel and oil storage including tanks and drums will be regularly inspected for leaks and signs of damage.
17. The plant used during construction will be regularly inspected for leaks and fitness for purpose, and.
18. The LEMP includes an emergency response plan for the construction phase to deal with accidental spillages.

If water pollution is identified the following steps would be adhered to:

1. STOP - work in the immediate area should be stopped and the source of the pollutant identified.

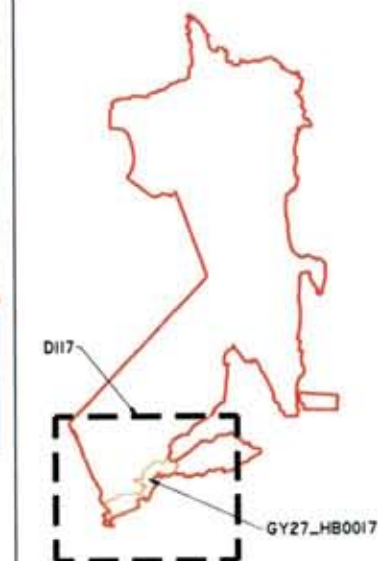
2. CONTAIN - the source of the pollutant should be contained using a suitable method. Pollution watercourses should be temporarily diverted around the source of pollutant if appropriate.

3. NOTIFY - The relevant authorities (the Manager / Forester / NFI / Local Authority etc.) should be notified immediately to ensure that measures can be implemented downstream to protect fisheries and other sensitive areas.



- LEGEND**
- STUDY AREA
 - HARVEST BLOCK BOUNDARIES
 - EPA RIVERS
 - 10M WATERCOURSE BUFFER
 - HARVEST DRAINS
 - EPA LAKES
 - RELEVANT WATERCOURSES
 - 5M RELEVANT WATERCOURSE BUFFER
 - TEMPORARY SILT TRAPS
 - DRAIN BLOCKING
 - DIRECTION OF RESTORATION WORKS
 - SILT FENCING
 - WORK ZONES <25HA

KEY PLAN



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PLANNING & DEVELOPMENT SECTION

23 FEB 2023 00:00

Date Description Chkd Signed

Revisions

Client: COLLTE

Job: DERRYCLARE WILD WESTERN PEATLANDS PROJECT, Co. GALWAY

Title: GY27_HB0017 - CONSTRUCTION PHASE DRAINAGE LAYOUT

Figure No: D117

Drawing No: P1616-0-0223-A3-D117-Rev A

Sheet Size: A3 Project No.: P1616-0

Scale: 1:5,000 (A3) Drawn By: GD

Date: 07/02/2023 Checked By: MG