



## **APPENDIX 4-5**

***HARVEST MANAGEMENT PLAN***





### Proposed Measures to Protect Social & Environmental Features & Considerations (Cont..)

<input checked="" type="checkbox"/> Water sampling	<input type="checkbox"/> Forest edge planting
<input checked="" type="checkbox"/> Install silt traps/barriers	<input type="checkbox"/> Environmental setback planting
<input checked="" type="checkbox"/> Drain blocking/slow-water dams	<input type="checkbox"/> Other (specify)
<input checked="" type="checkbox"/> Utilise brush mats along extraction routes	<input type="checkbox"/> Other (specify)
<input checked="" type="checkbox"/> Exclude machinery in areas adjoining aquatic zones, water abstraction points & water-related 'hotspots'	<input type="checkbox"/> Other (specify)

### Ancillary Information (include relevant information to expand on above & to detail important aspects such as the sequencing of operations, the width of environmental setbacks & contingency planning. Ensure accurate cross-referencing and consistency with maps) \*

#### Harvesting Plan

Harvesting operations to be carried out by fully-trained, experienced forest contractors, using appropriate equipment for clear felling the site to comply with *Forest Harvesting and the Environment Guidelines*. This will include harvester and low ground pressure forwarder with a 14 tonne bunk capacity.

Onsite supervision will be present during operations to ensure that all operations are carried out appropriately and that water protection measures are adequate and remain effective throughout. If necessary, triggering contingency measures e.g to cease operations when necessary. Regular inspections during operations will allow for immediate corrective action in the case of unforeseen issues.

Where possible, harvesting and extraction processes will be undertaken during dry periods, to limit surface water run-off and soil compaction. Where brush material on site is limited, brush mats will be deployed to help reinforce sections of the extraction route outside of the existing hardcore forestry road. All operations to comply with *Forest Harvesting and the Environment Guidelines* and *Forestry and Water Quality Guidelines*.

The extent of all necessary tree felling will be identified and demarcated with markings on the ground in advance of any felling commencing. 5m buffer zones will be established either side of the relevant watercourses within which there will be no traversal of machinery permitted. Similarly, 10m buffer zones will be established either side of aquatic zones (AZs). Note that prior to harvesting works all operatives will be made aware of such buffers and any site safety hazards.

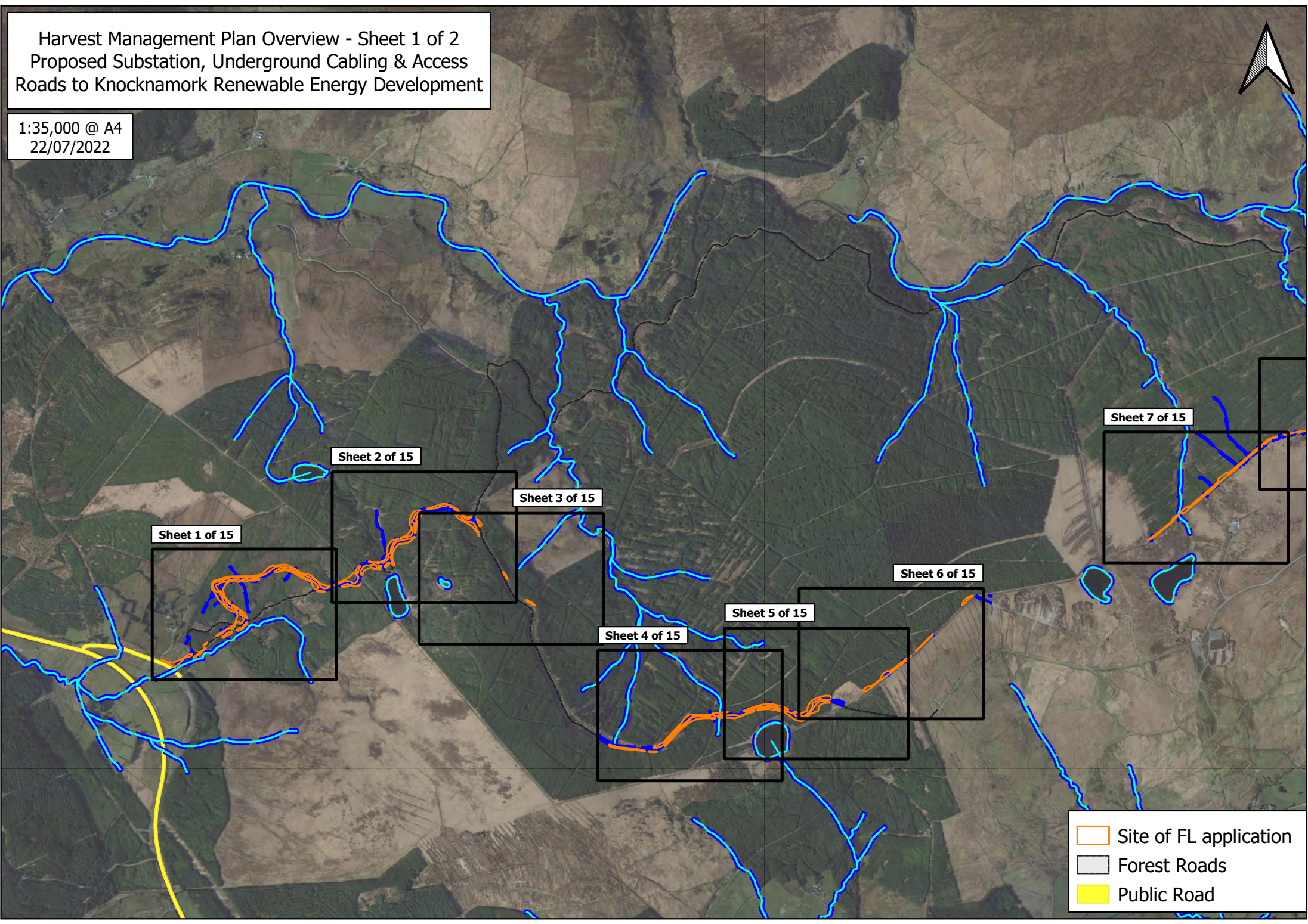
Silt traps will be installed within any relevant watercourses within or adjacent to the felling compartments, prior to the commencement of felling works, to preserve the turbidity and integrity of the downstream river catchment. These sediment traps will be monitored and maintained throughout the period of works and for a period afterwards until the site has stabilised. Additional traps may be placed along the edge of the adjacent aquatic zones, in locations where surface run-off may be possible. Temporary bridges will be used where machine routes cross relevant watercourses. Water sampling will be utilised upstream and downstream of felling at suitable sampling locations, taken from the stream/riverbank with no in-stream access permitted.

Timber will be stacked at intervals along existing roads, keeping back from any forestry drains to prevent contamination to watercourses. It is intended to extract timber from site using existing forest roads connecting to public roads, with felling seen on sheets 1 – 6 travelling west to the N22 and sheets 7 - 15 travelling east to the R582.



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Proposed Substation, Underground Cabling & Access  
Roads to Knocknamork Renewable Energy Development

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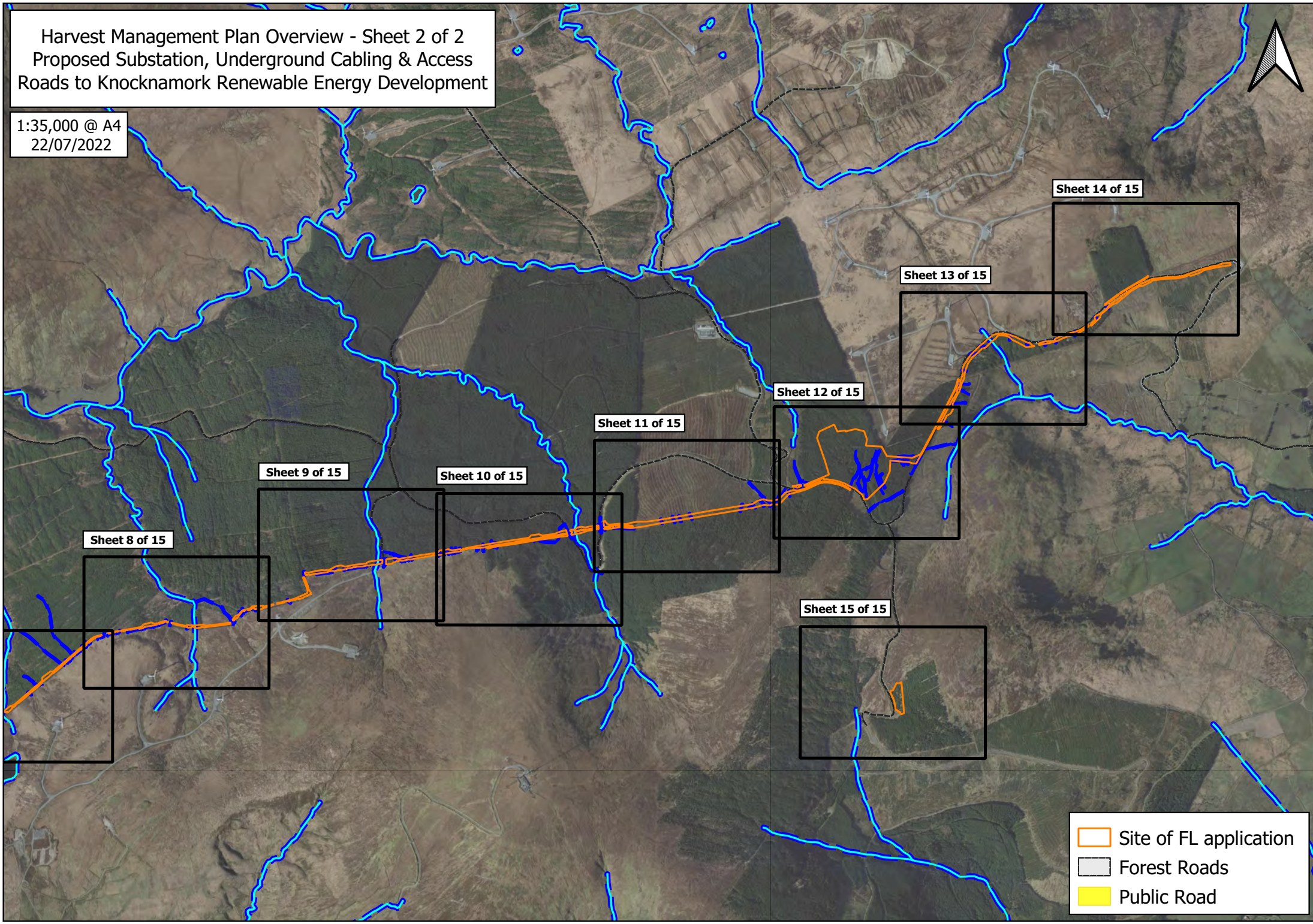
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-  Site of FL application
-  Forest Roads
-  Public Road



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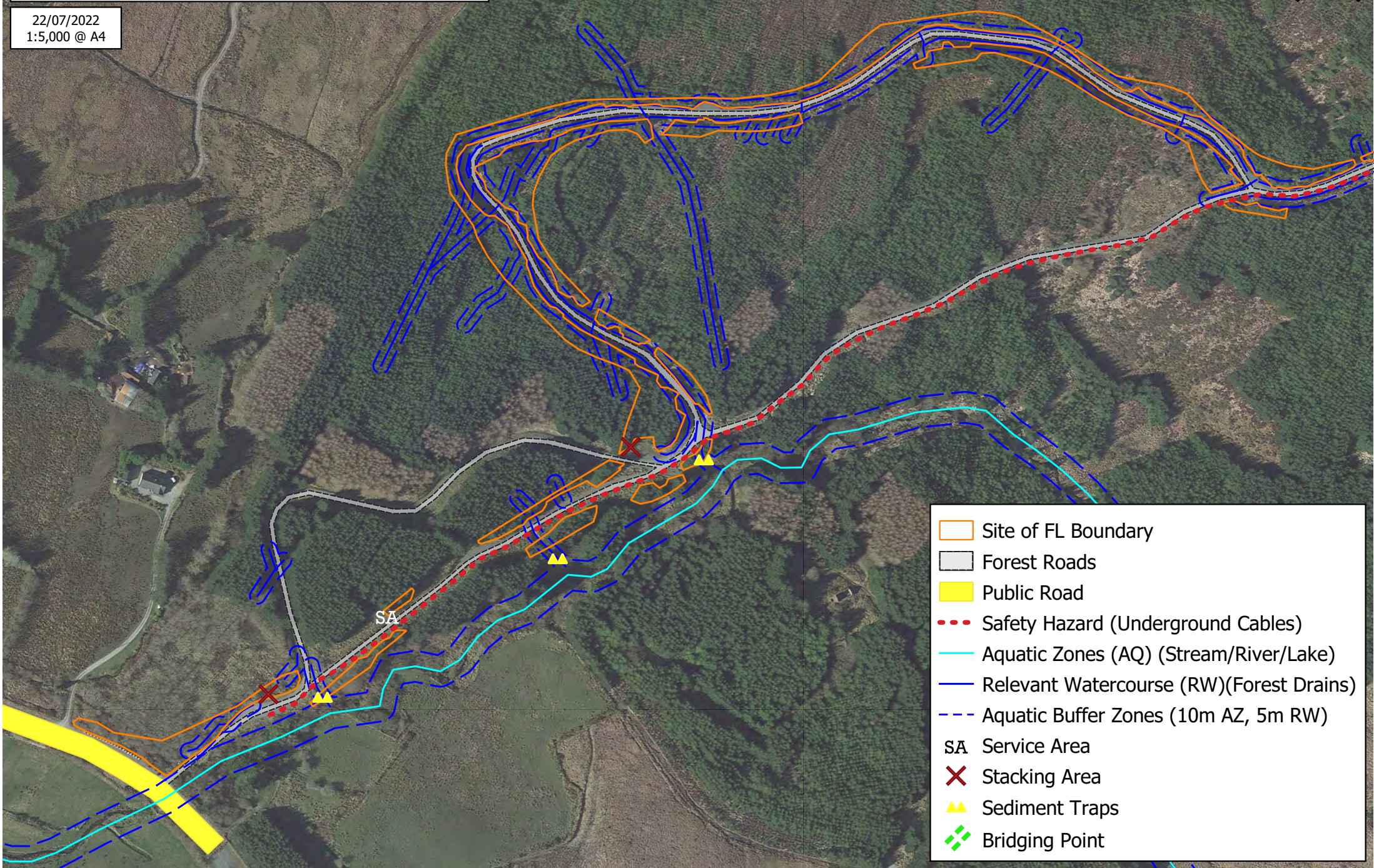
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-  Site of FL application
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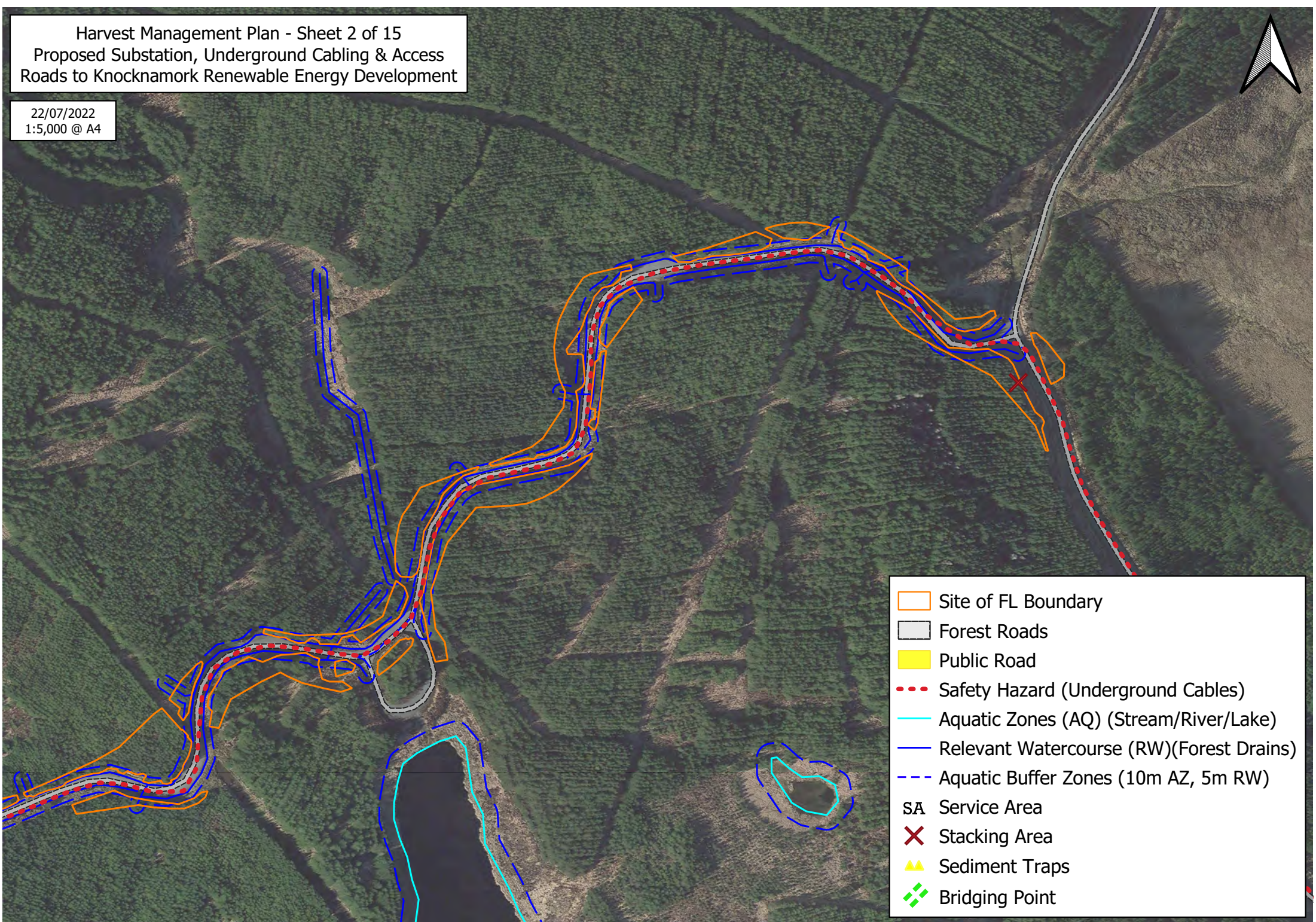













- Site of FL Boundary
- Forest Roads
- Public Road
- Safety Hazard (Underground Cables)
- Aquatic Zones (AQ) (Stream/River/Lake)
- Relevant Watercourse (RW)(Forest Drains)
- Aquatic Buffer Zones (10m AZ, 5m RW)
- SA Service Area
- Stacking Area
- Sediment Traps
- Bridging Point



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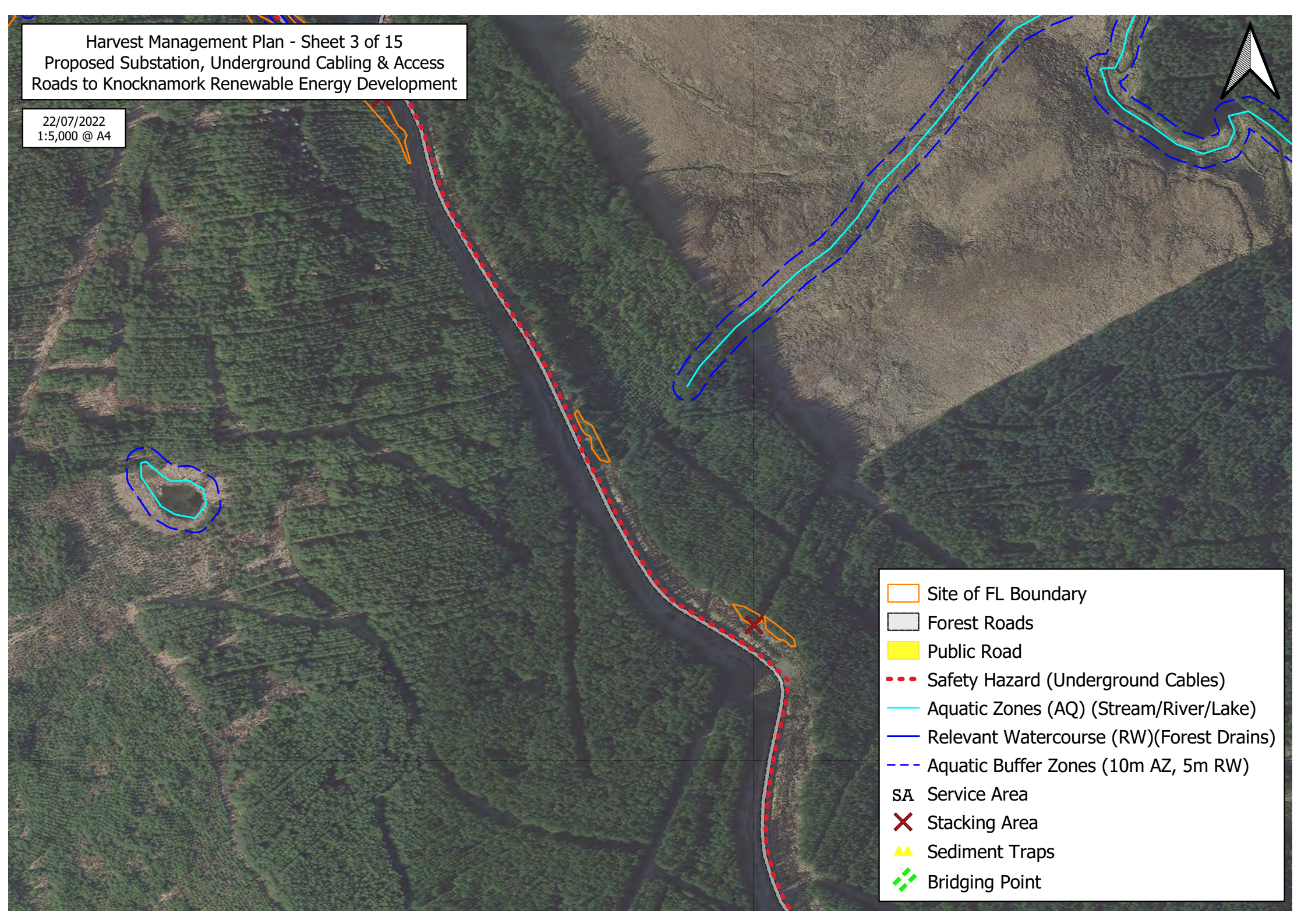


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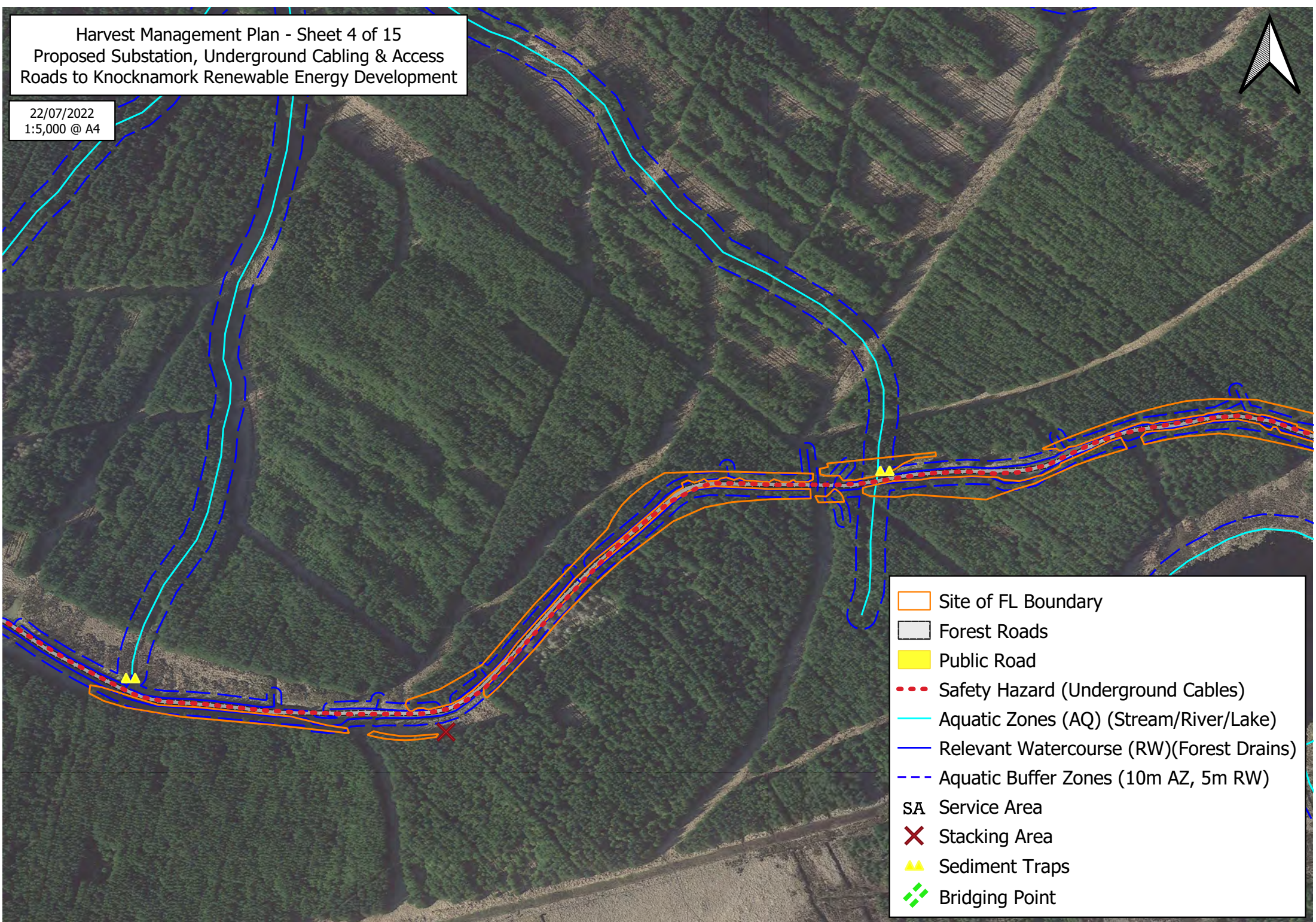
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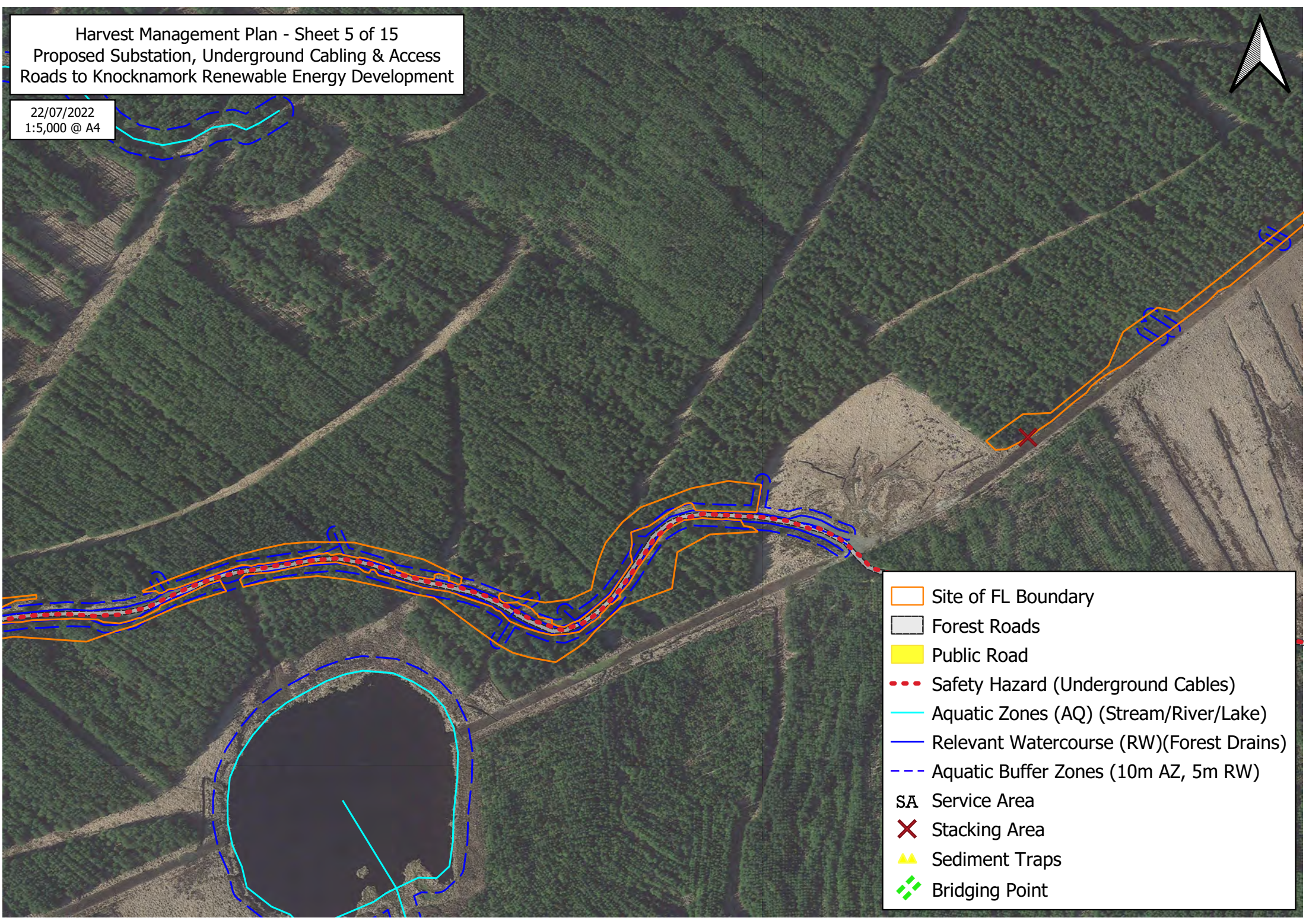


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











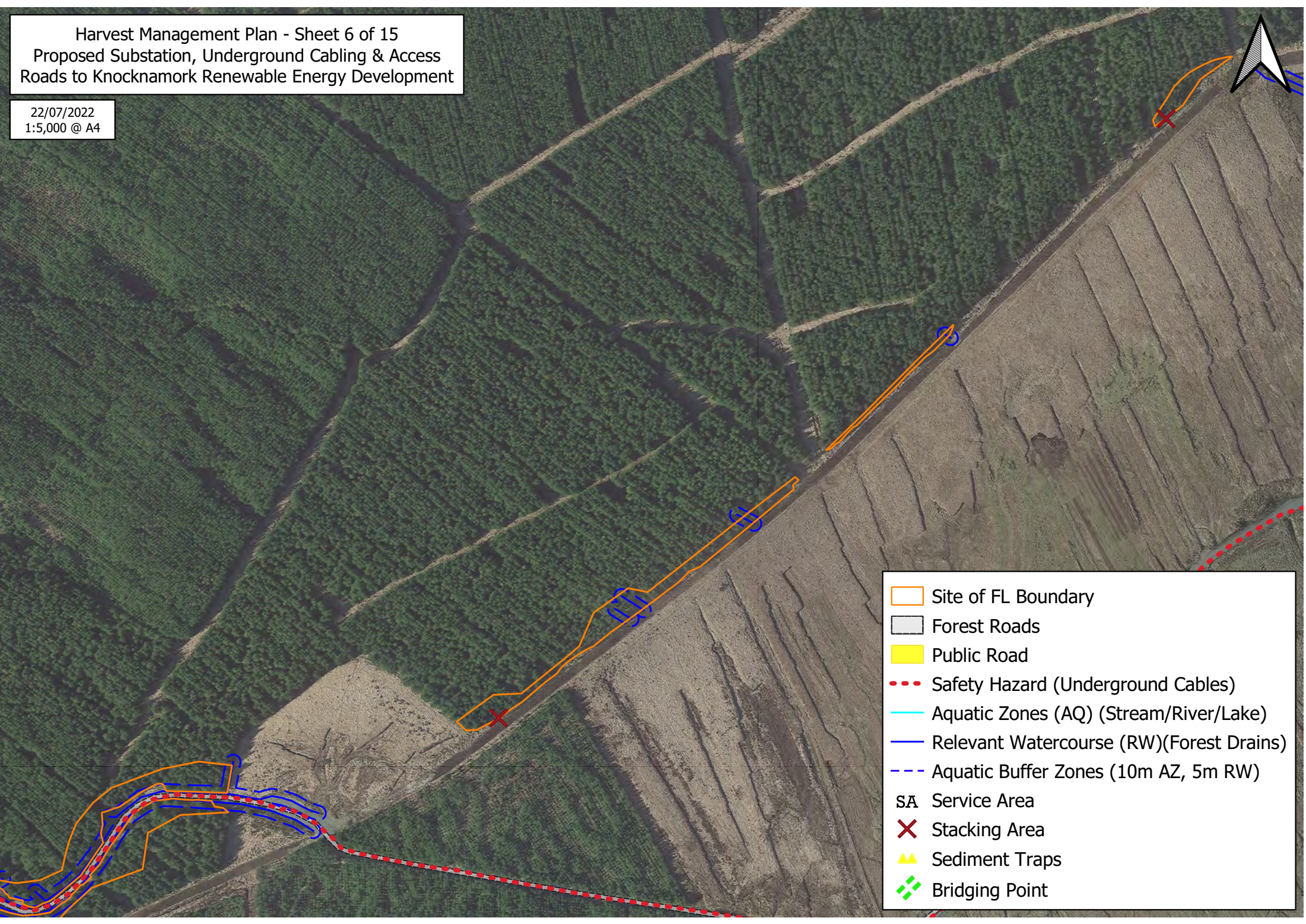


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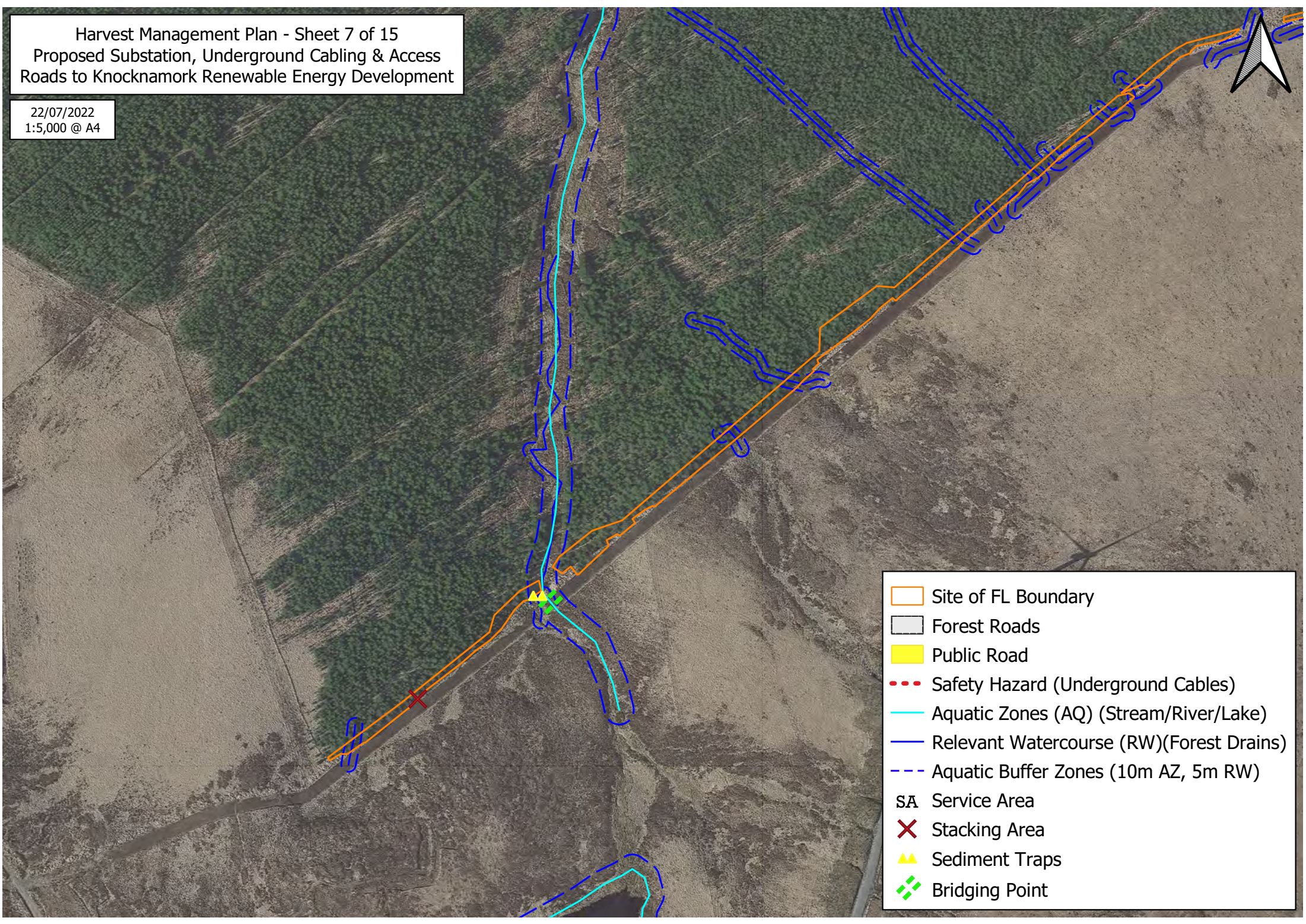


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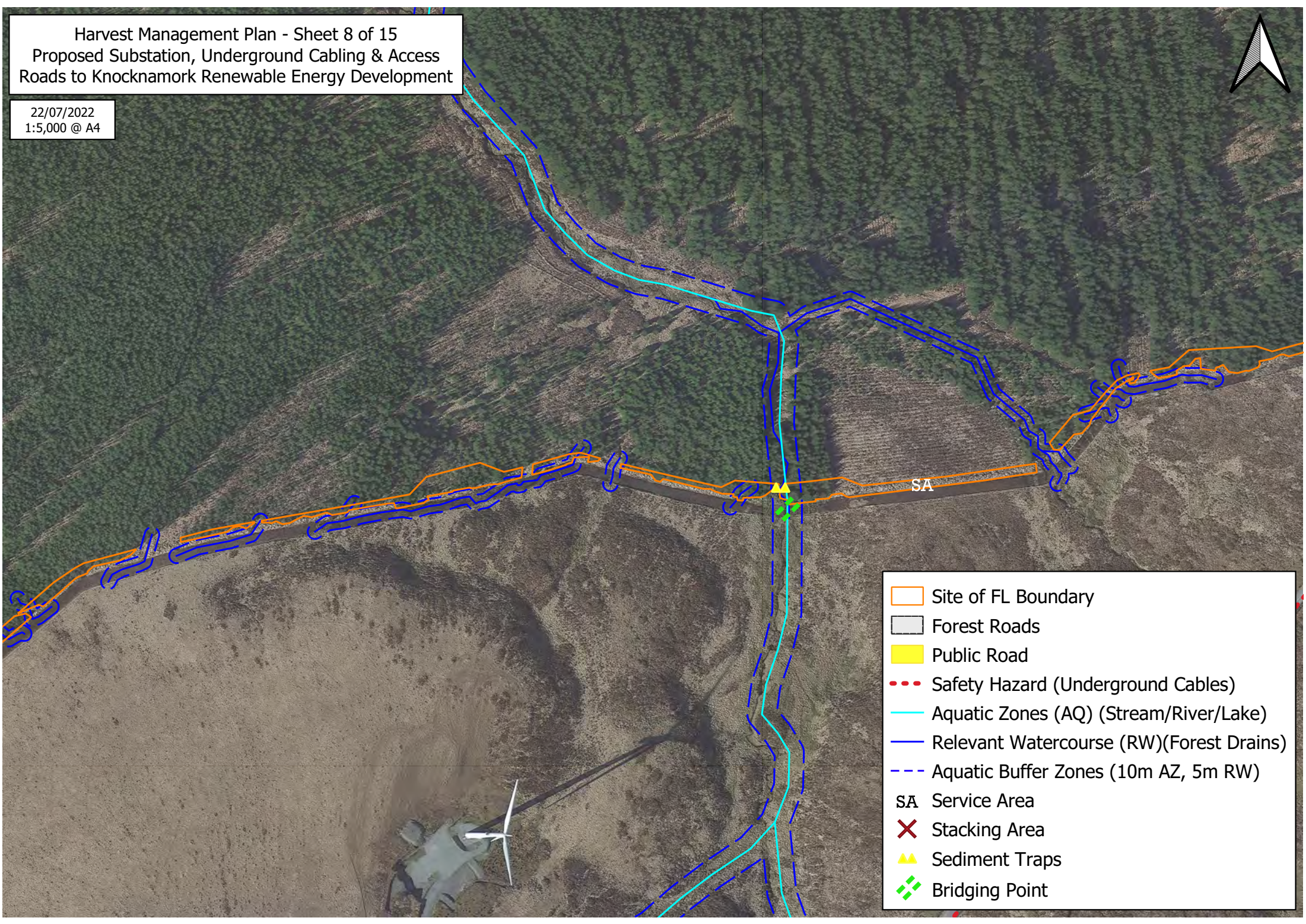
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









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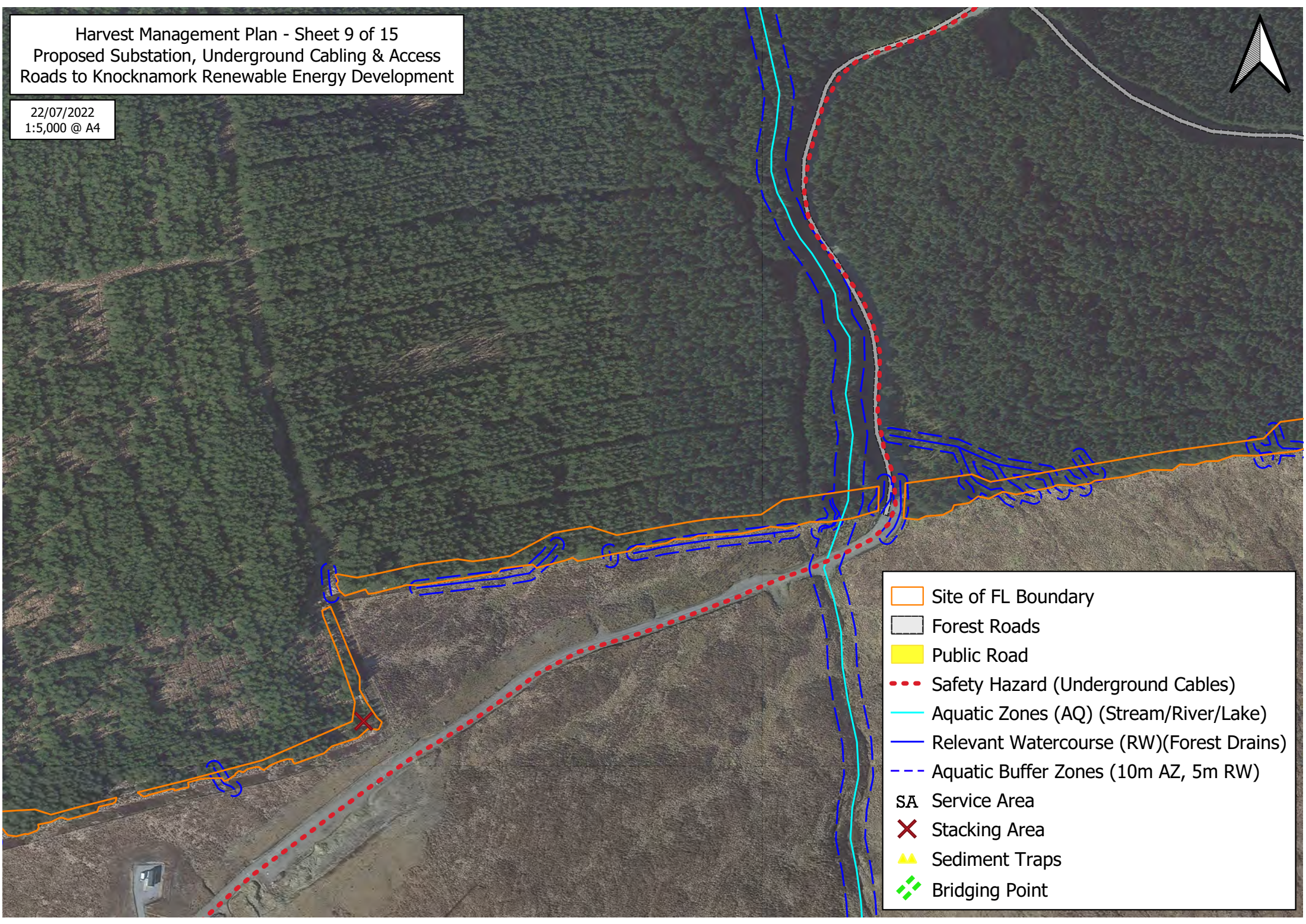


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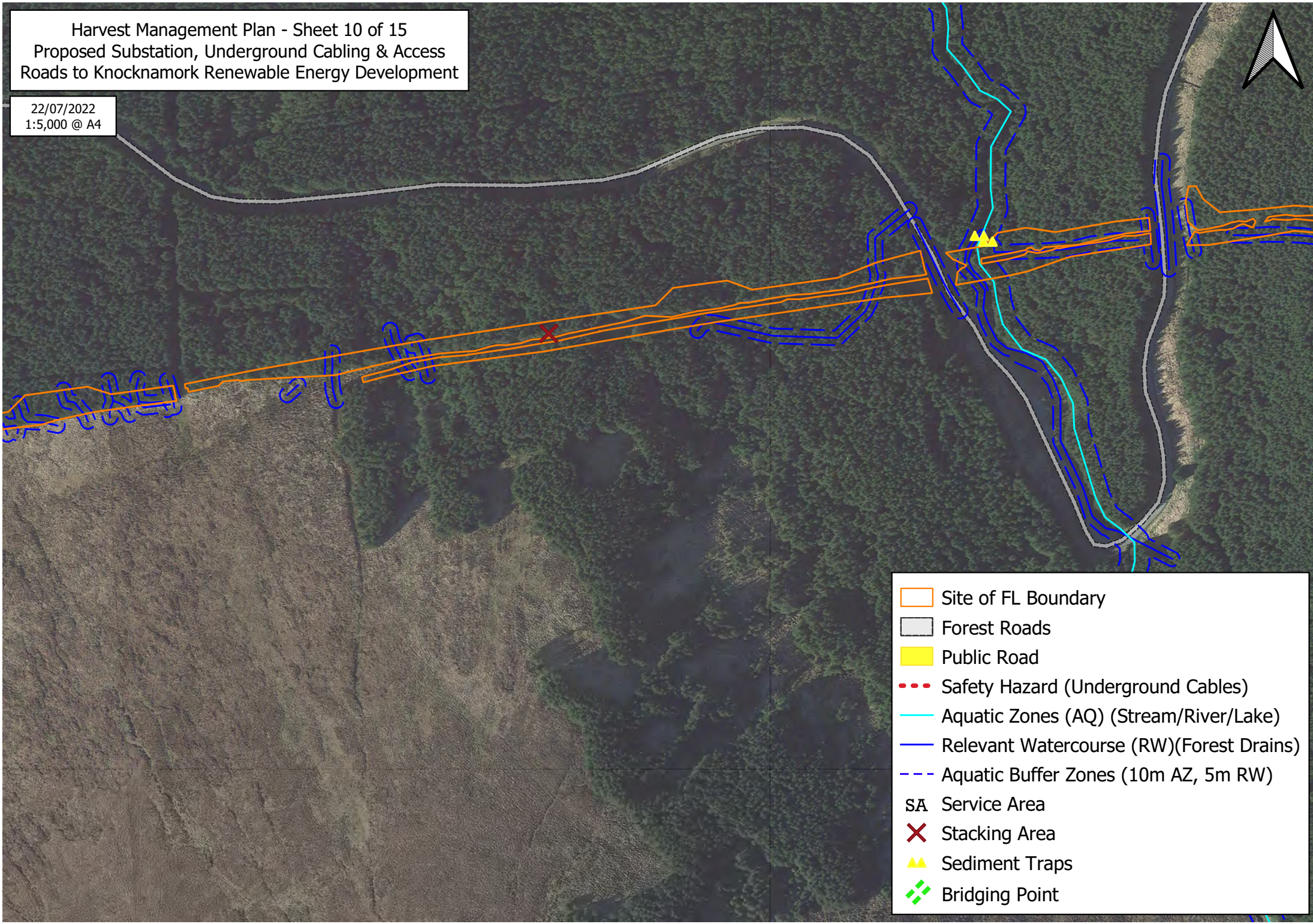
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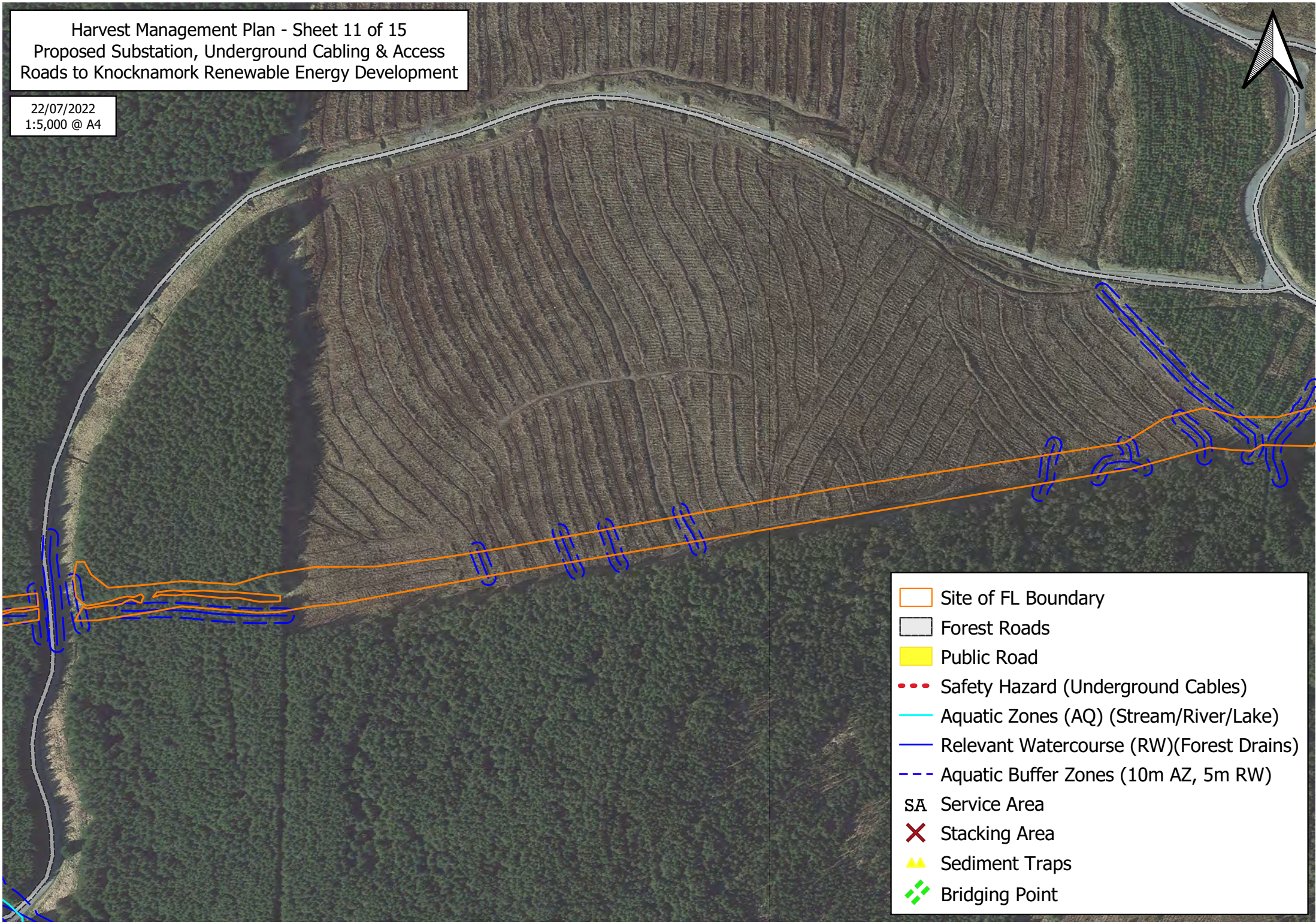












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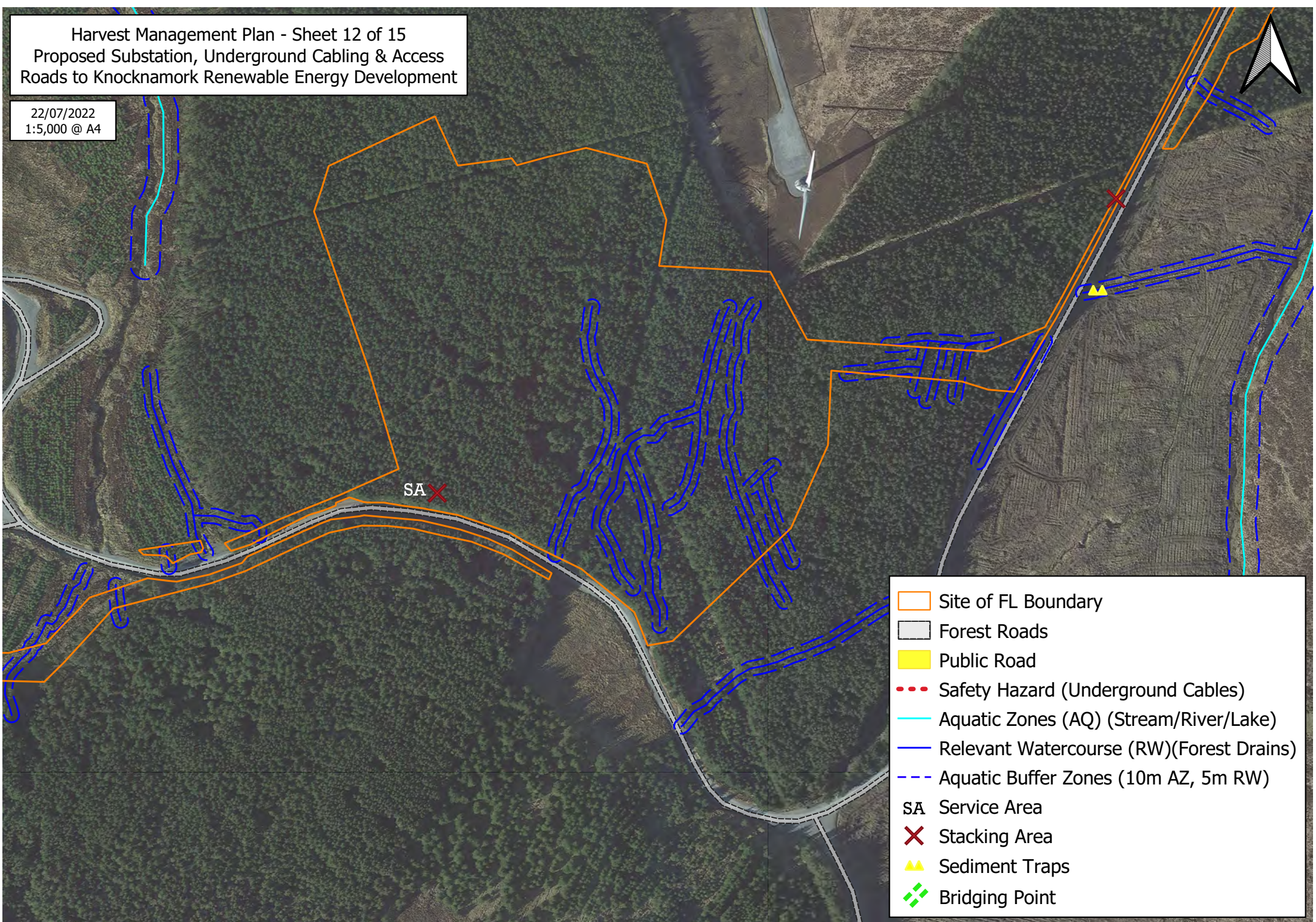


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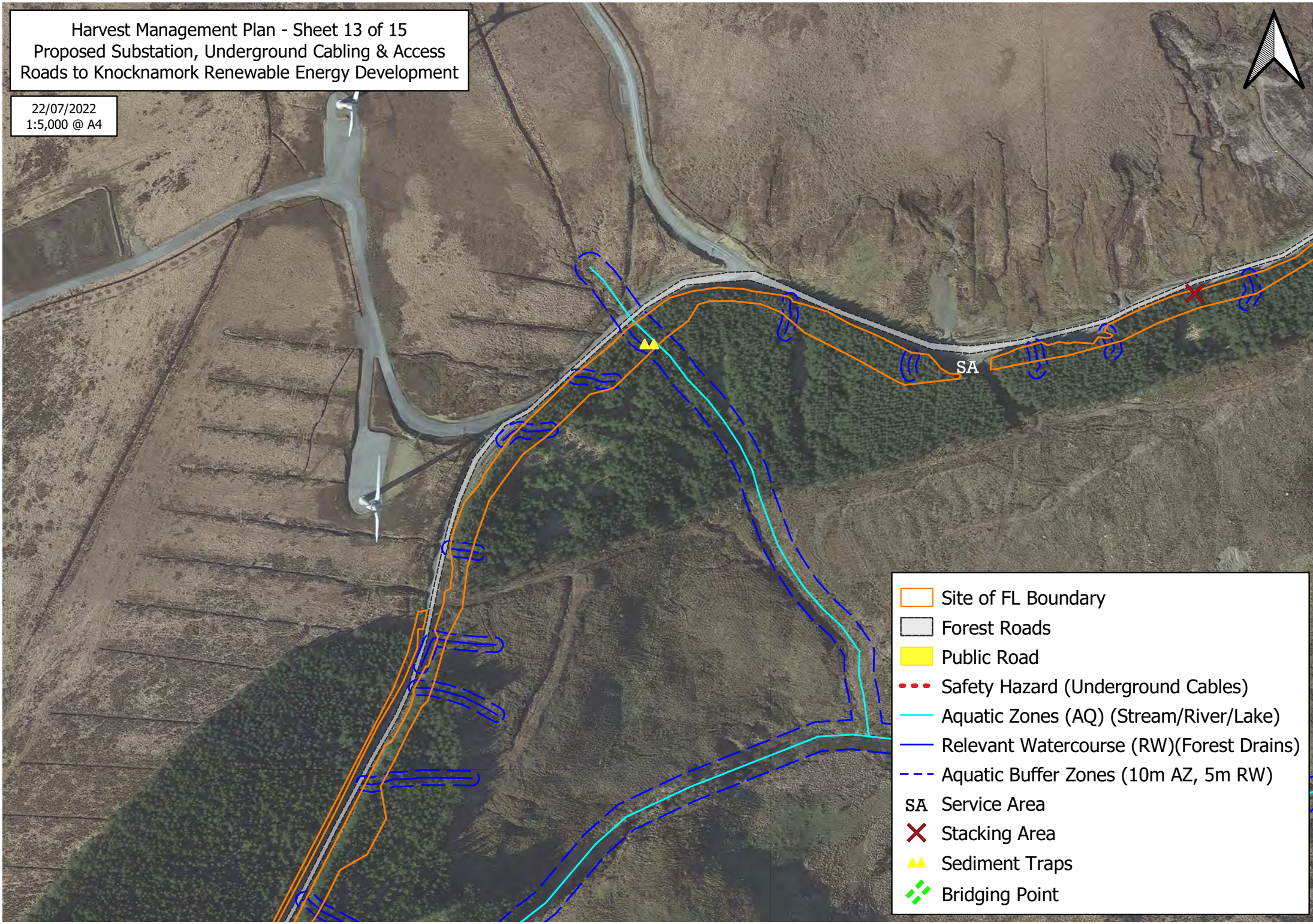


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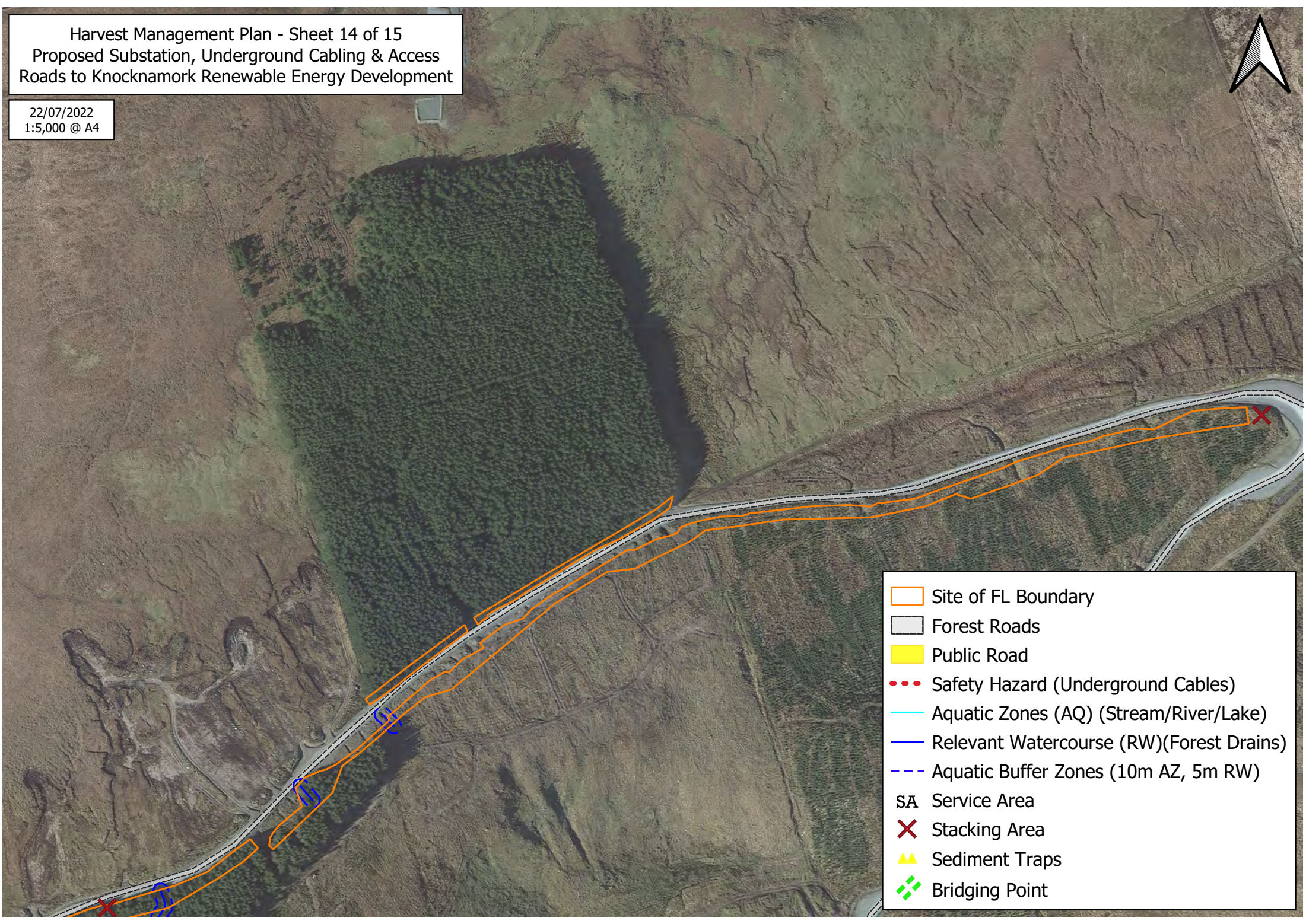


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