

# 3

DESIGN EVOLUTION & ALTERNATIVES

## Chapter 3 - Design Evolution and Alternatives

ES figure no.	Drawing title
3.1	Turbine Layout Evolution
3.2	Infrastructure Design Evolution
3.3	Combined Constraints and Infrastructure



# UNSHINAGH

## FIGURE 3.1 TURBINE LAYOUT EVOLUTION

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2021 LICENCE NUMBER 242.

- ⊕ Turbines
- Land Under Applicant's Control
- Exclusion Zones

Layout 1 - PNIRuns003  
13 turbines x 136 m rotor diameter

Layout 2 - PNIRuns007  
16 turbines x 136 m rotor diameter

Layout 3 - PNIRuns023  
15 turbines x 136 m rotor diameter

Layout 4 - PNIRuns024  
14 turbines x 136 m rotor diameter



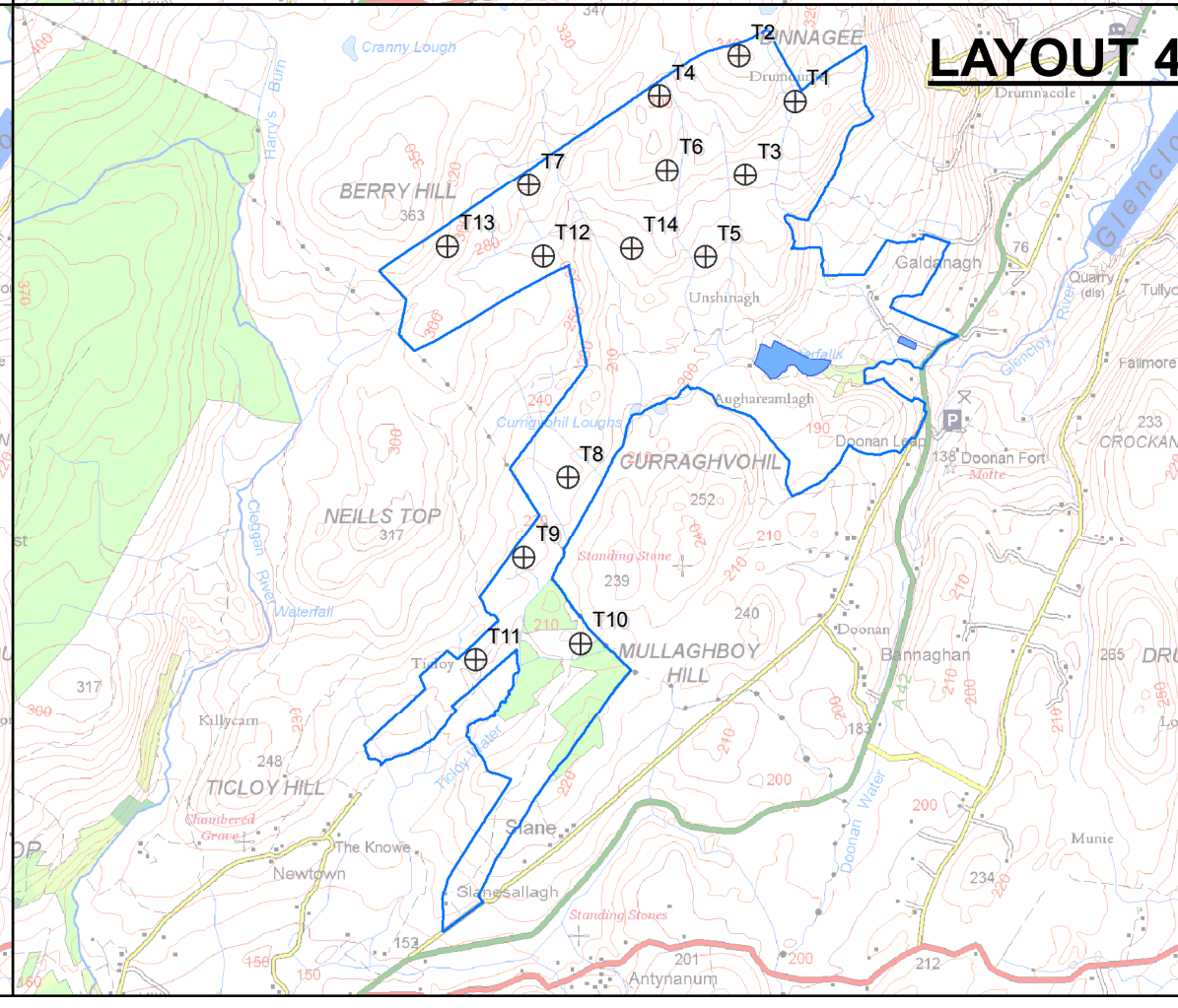
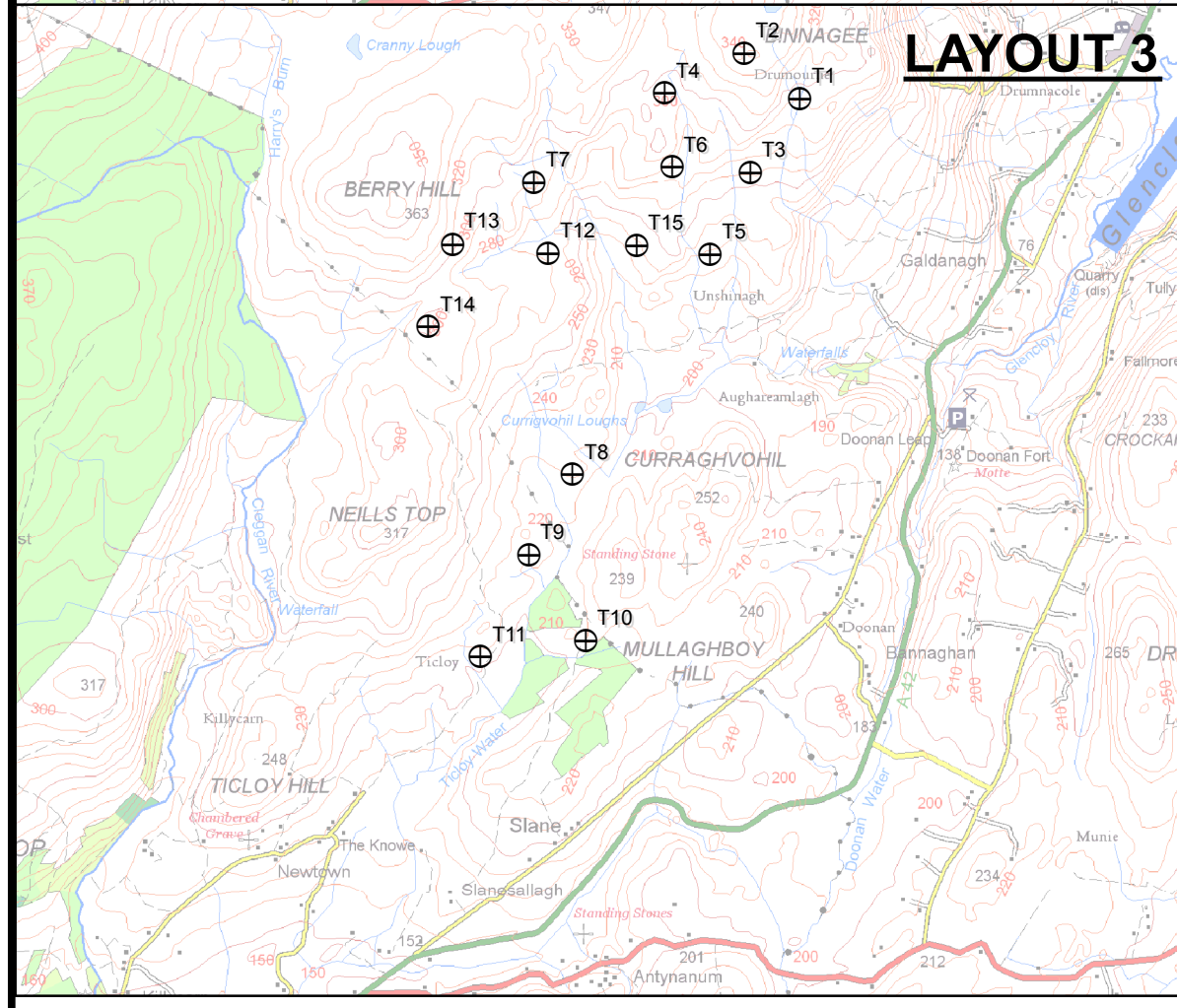
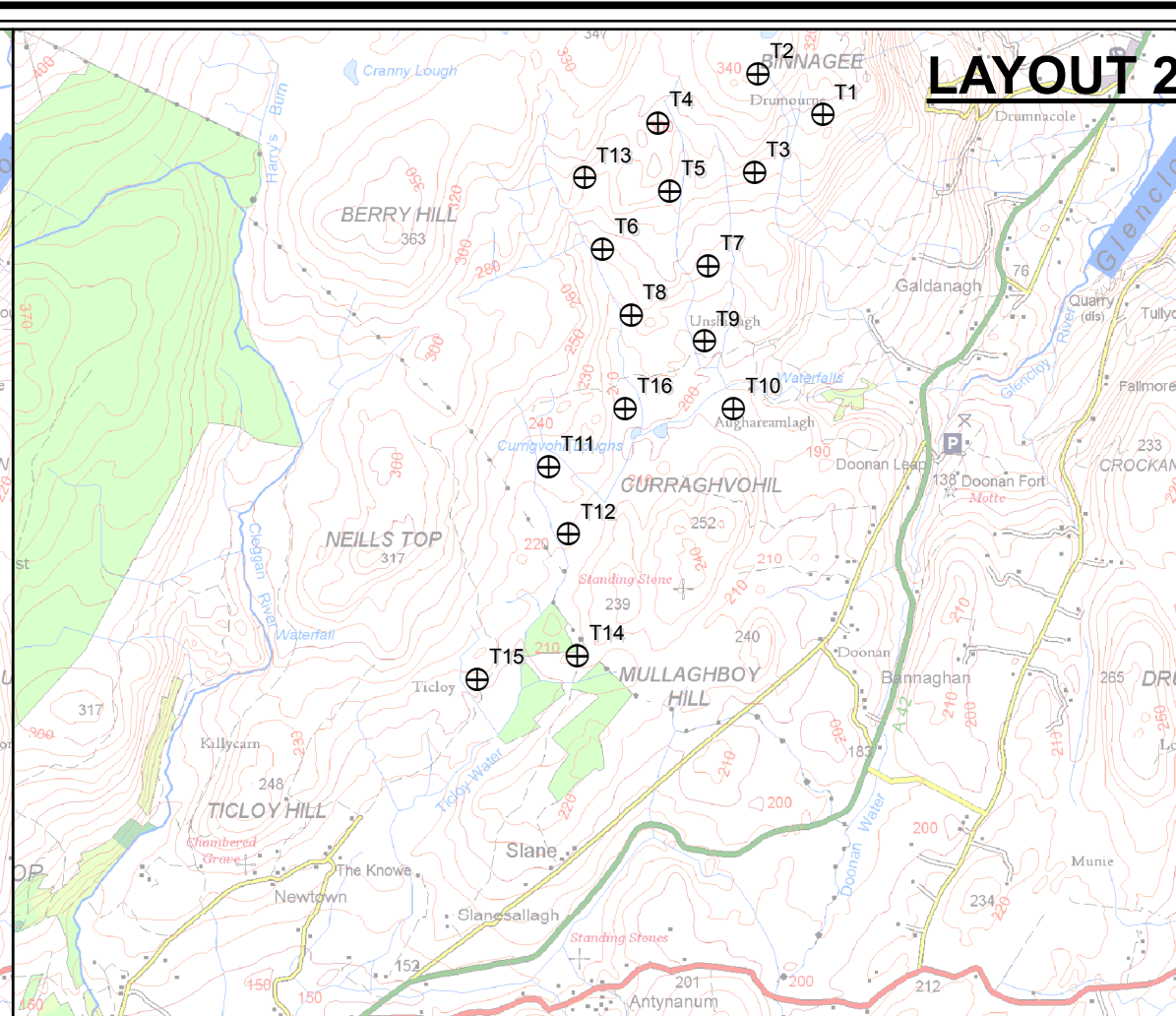
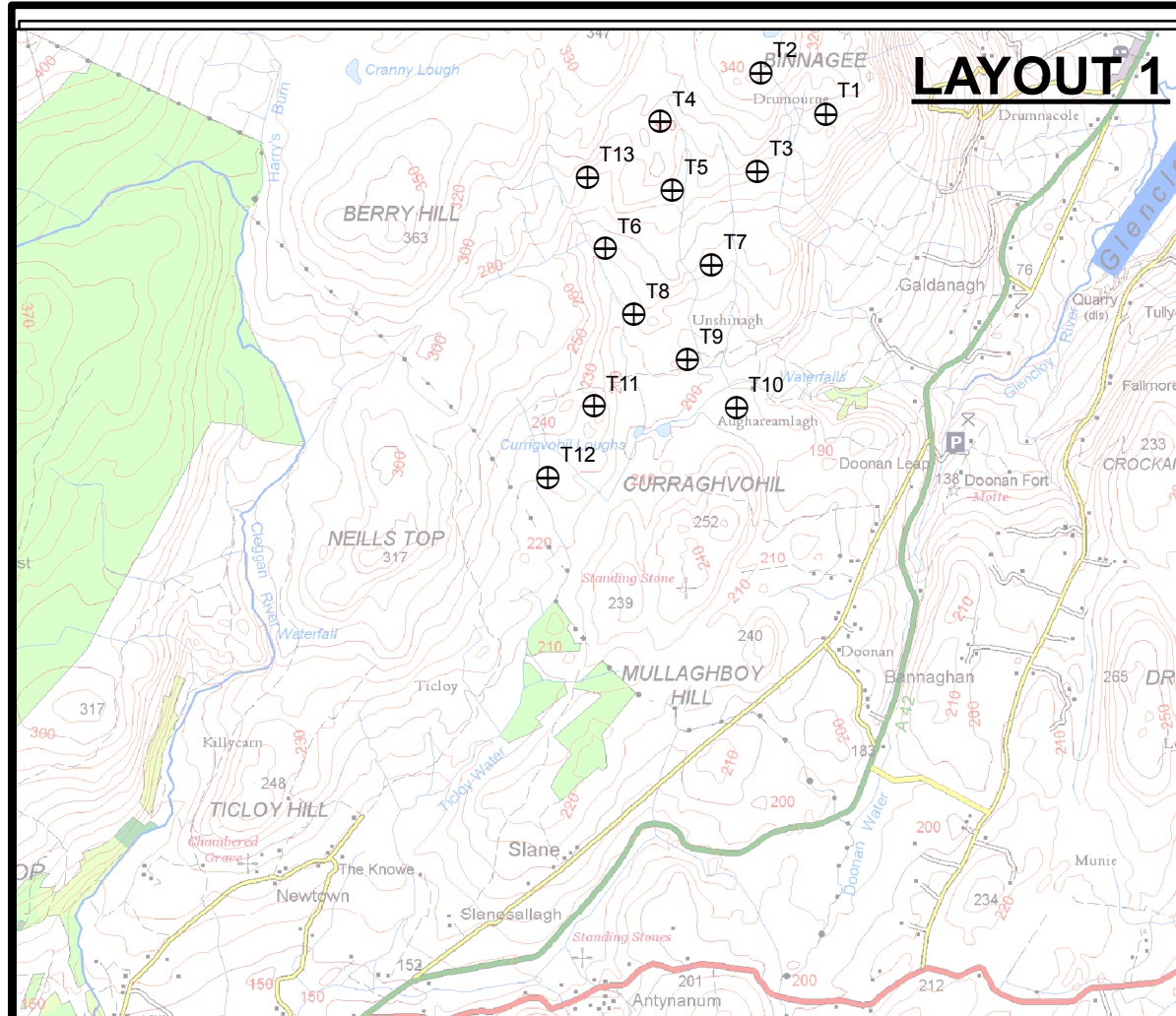
LAYOUT DWG: N/A      T-LAYOUT NO.: N/A

DRAWING NUMBER  
**04291-RES-LAY-DR-TE-011**

SCALE - 1:45,000 @ A3

**ENVIRONMENTAL STATEMENT &  
PLANNING APPLICATION 2021**

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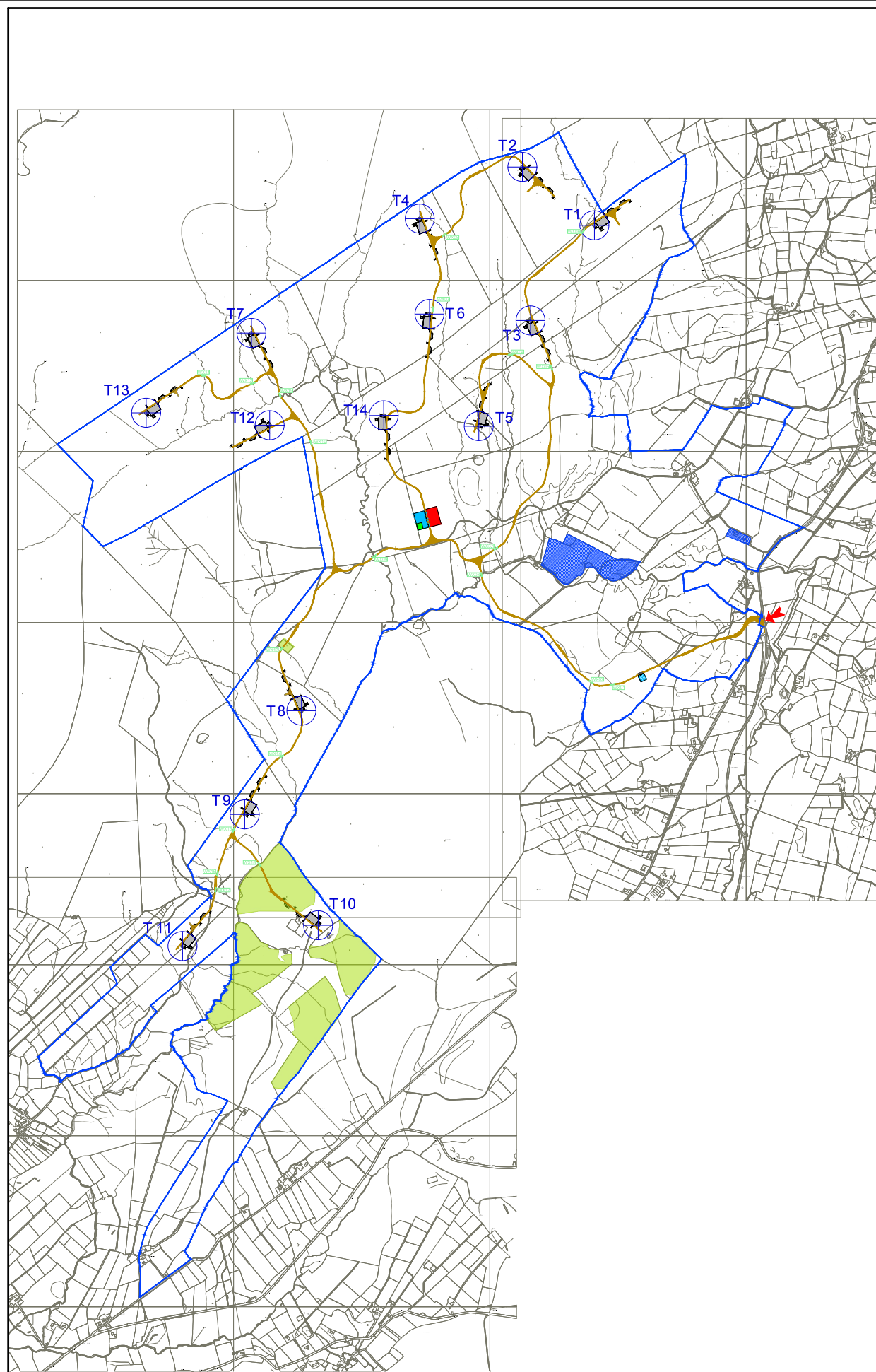
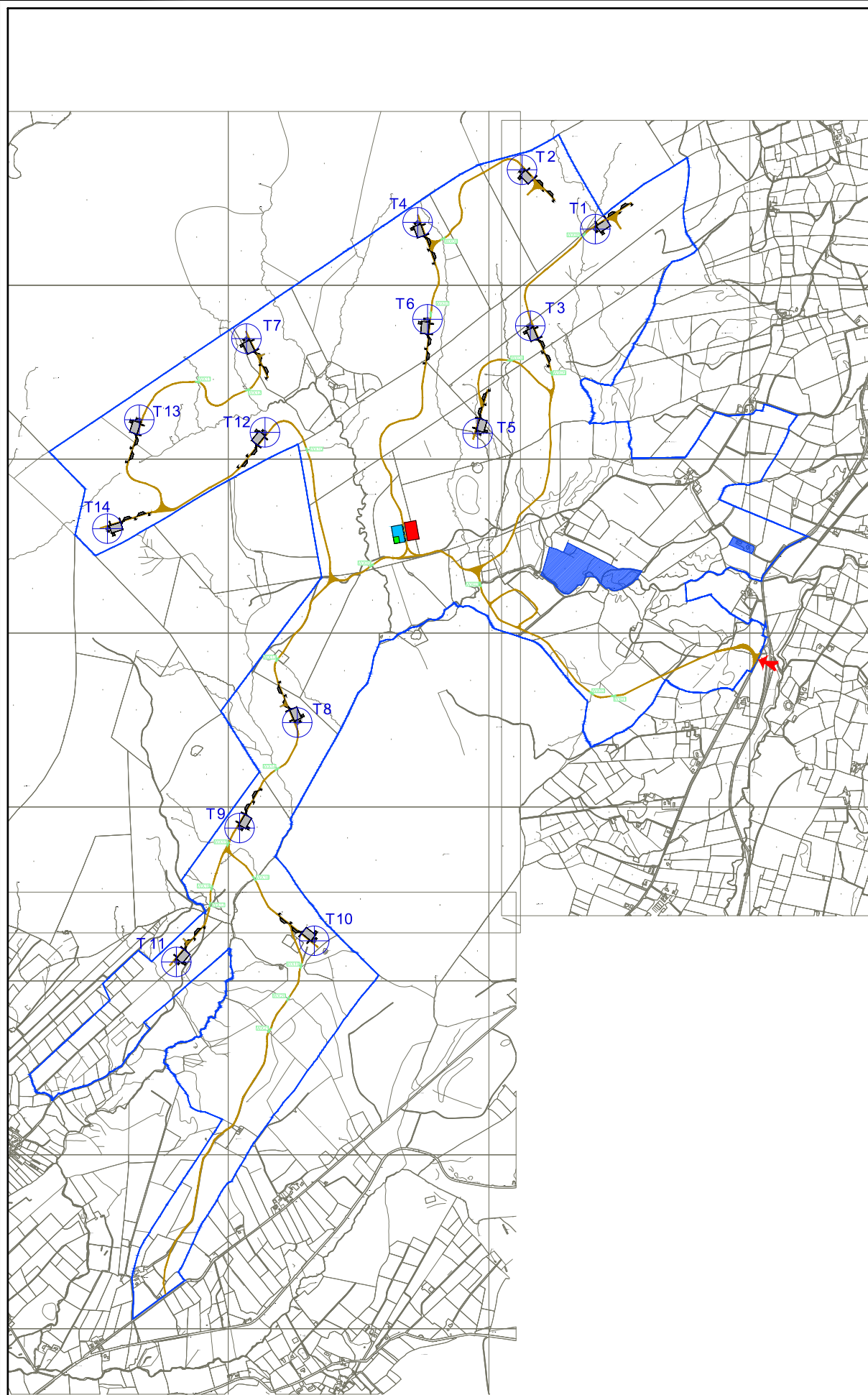


# UNSHINAGH WIND FARM

## FIGURE 3.2

### INFRASTRUCTURE DESIGN EVOLUTION

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#### KEY

- LAND UNDER APPLICANTS CONTROL
- LAND NOT INCLUDED
- ⊕ WIND TURBINE LOCATION
- NEW SITE TRACKS
- WATERCOURSE CROSSING
- CRANE HARDSTANDING AREA
  - PERMANENT
  - TEMPORARY
- TEMPORARY CONSTRUCTION COMPOUND
- ENERGY STORAGE COMPOUND
- TEMPORARY ENABLING WORKS COMPOUND
- WATERLESS WHEEL WASH
- CONTROL BUILDING & SUBSTATION COMPOUND WITH PERMANENT HARDSTANDING AREA
- ➔ SITE ENTRANCE LOCATION
- FORESTRY TO BE REMOVED



DESIGN 1: 04291-RES-LAY-DR-PE-002 (REV 2)  
(PNIRuns014)

DESIGN 2: 04291-RES-LAY-DR-PE-002 (REV 3)  
(PNIRuns024)

LAYOUT DWG N/A T-LAYOUT NO. AS SHOWN

DRAWING NUMBER  
**04291-RES-LAY-DR-PE-002**

SCALE - 1:25,000 @ A3

**ENVIRONMENTAL STATEMENT**  
**2021**

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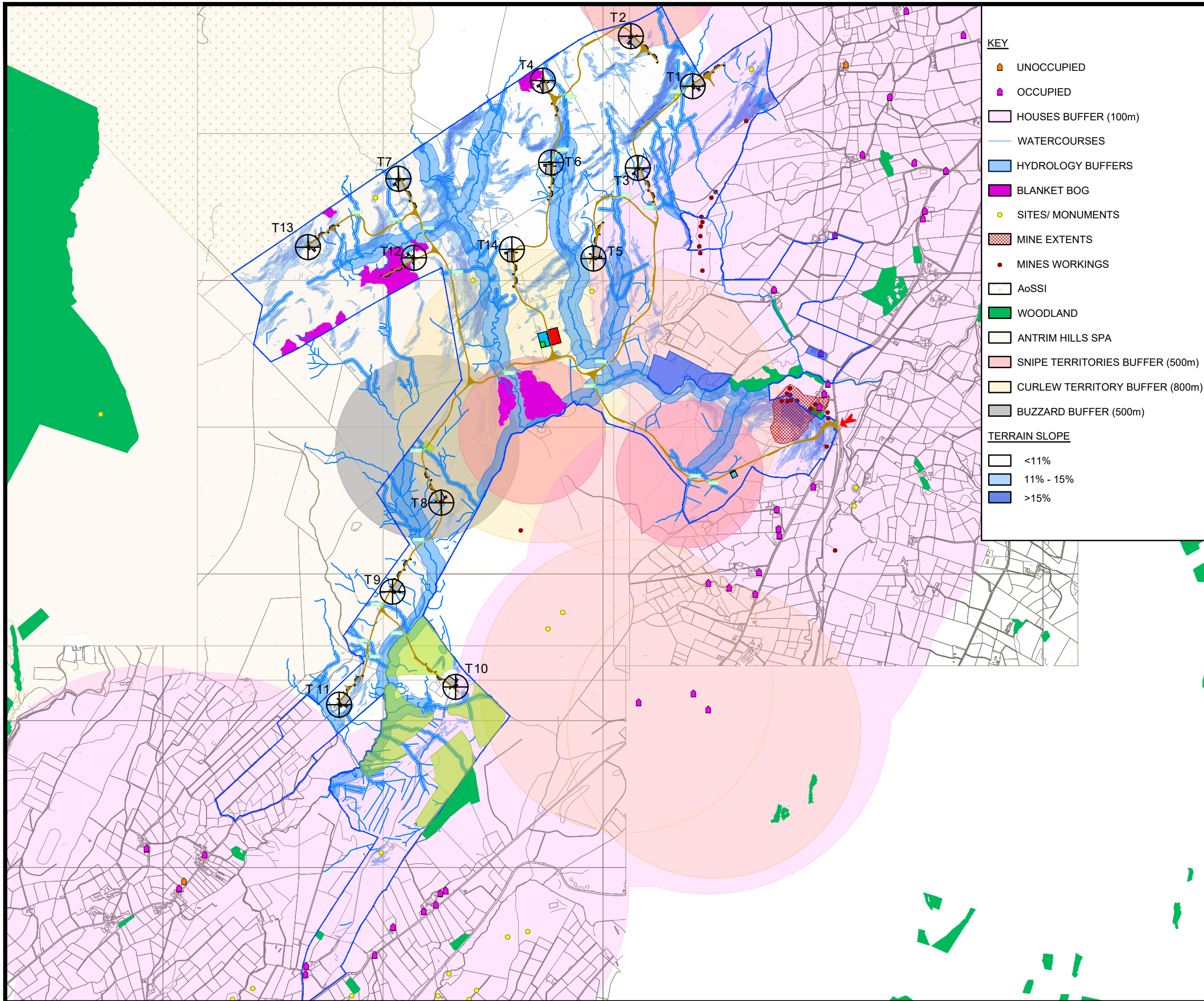


# UNSHINAGH WIND FARM

## FIGURE 3.3

### COMBINED CONSTRAINTS & INFRASTRUCTURE LAYOUT

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**KEY**

- UNOCCUPIED
- OCCUPIED
- HOUSES BUFFER (100m)
- WATERCOURSES
- HYDROLOGY BUFFERS
- BLANKET BOG
- SITES/ MONUMENTS
- MINE EXTENTS
- MINES WORKINGS
- AoSSI
- WOODLAND
- ANTRIM HILLS SPA
- SNIFE TERRITORIES BUFFER (500m)
- CURLEW TERRITORY BUFFER (800m)
- BUZZARD BUFFER (500m)

**TERRAIN SLOPE**

- <11%
- 11% - 15%
- >15%

**KEY**

- LAND UNDER APPLICANTS CONTROL
- LAND NOT INCLUDED
- WIND TURBINE LOCATION
- NEW SITE TRACKS
- WATERCOURSE CROSSING
- CRANE HARDSTANDING AREA
  - PERMANENT
  - TEMPORARY
- TEMPORARY CONSTRUCTION COMPOUND
  - ENERGY STORAGE COMPOUND
- TEMPORARY ENABLING WORKS COMPOUND
- WATERLESS WHEEL WASH
- CONTROL BUILDING & SUBSTATION COMPOUND WITH PERMANENT HARDSTANDING AREA
- SITE ENTRANCE LOCATION
- FORESTRY TO BE REMOVED



LAYOUT DWG	N/A	T-LAYOUT NO.	PNIRuns024
DRAWING NUMBER	<b>04291-RES-LAY-DR-EN-001</b>		
SCALE - 1:20,000 @ A3			
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