



PRELIMINARY

Assessment of Landscape Effects

RANGITIKEI SOLAR FARM

FRV

MARTON, RANGITIKEI DISTRICT

Rev 04 - REFERRAL
May 2026

Information and Quality Control

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1.0 INTRODUCTION

This Assessment of Landscape Effects and natural character has been prepared by SLR Consulting Limited for FRV.

FRV propose to construct, operate, maintain, and where necessary decommission, a utility scale solar farm, associated substation and battery energy storage system (BESS), ancillary activities and infrastructure, including provision for access to the site, to connect and supply electricity to the National Grid immediately to the north east of Marton, Rangitikei District. It is anticipated the proposal will include approximately 403ha of development area.

Specifically, the development is proposed to a 507ha mid-block area of rural properties located between Tūtaenui Road to the west, Calico Line to the south, State Highway 1 to the east and Colemans Road to the north. The site is located on flat rural land.

This report forms part of the documentation prepared for a referral application under the Fast-Track Approvals Act 2024 (FTAA)

1.1 Purpose and Scope

The purpose of this report is to assess the actual and potential landscape and visual effects of the proposal on the character and values of the local landscape.

The scope of the assessment is underpinned by the methodology provided in Section 1.2 below, where it describes:

- i) how the report is shaped by established professional guidance, and
- ii) the key activities and processes that have been undertaken.

The relevant policy context described in Section 1.3 has also shaped the assessment of landscape effects and the conclusions provided focus on aspects of landscape, amenity and visual effect.

1.2 Methodology

The New Zealand Institute of Landscape Architects (NZILA), Te Tangi a te Manu Aotearoa New Zealand Landscape Assessment Guidelines (July 2022) provide the technical backdrop to this landscape assessment. The guidelines are recognised within the landscape architectural profession as providing good practice guidance in the assessment of landscape effects under the Resource Management Act 1991 (RMA).

“The Guidelines adopt a principles-based approach to methodology that allows for assessment methods to be tailored to each situation. They emphasise transparency and reason, rather than adherence to prescriptive methods.”¹

The principals-based approach presented in the Guideline, includes several key tenets to landscape assessment within New Zealand.

Firstly, the guideline emphasises the need for the scope and method of assessment be tailored to:

- The nature of the proposal and associated degree of change in the landscape,
- The relevant landscape setting, and
- Associated policy framework.

In this instance, the proposal is for a 403ha solar farm on an approximate 507ha site to the north east of Marton to be constructed on largely flat rural pastoral land. The site is currently privately owned and used for grazing and crops.

The site is visible at distance from adjacent properties to the west and south and from a limited number of properties to the north and east. It is not visible from State Highway 1.

The area is generally flat with some areas of minor elevation to the north of the site. Consequently views of the site are contained to adjacent properties and nearby roads. Where views are possible distance, the predominantly flat topography and existing vegetation combined with proposed design mitigation limit perceptions of the proposed solar farm. Consequently, the scale of the solar farm is absorbed into the surrounding landscape.

The development will introduce an infrastructural form of light and low level structure across the majority of the site. This will represent a substantial change to the site's landscape character. Built form will be set back from boundaries with some large areas to the boundaries retained as pasture. Appropriate tree planting to the boundaries and around the substation and BESS is planned to reduce landscape effects (extent of planting will be confirmed through the design process).

The relevant surrounding landscape generally includes State Highway 1, a cemetery and fertiliser plant to the east, residential development to the western boundary, some residential development to the south and Nga Tawa Diocesan School and rural properties with farmsteads to the north and south.

The site is zoned General Rural Zone in the Rangitikei District Plan.

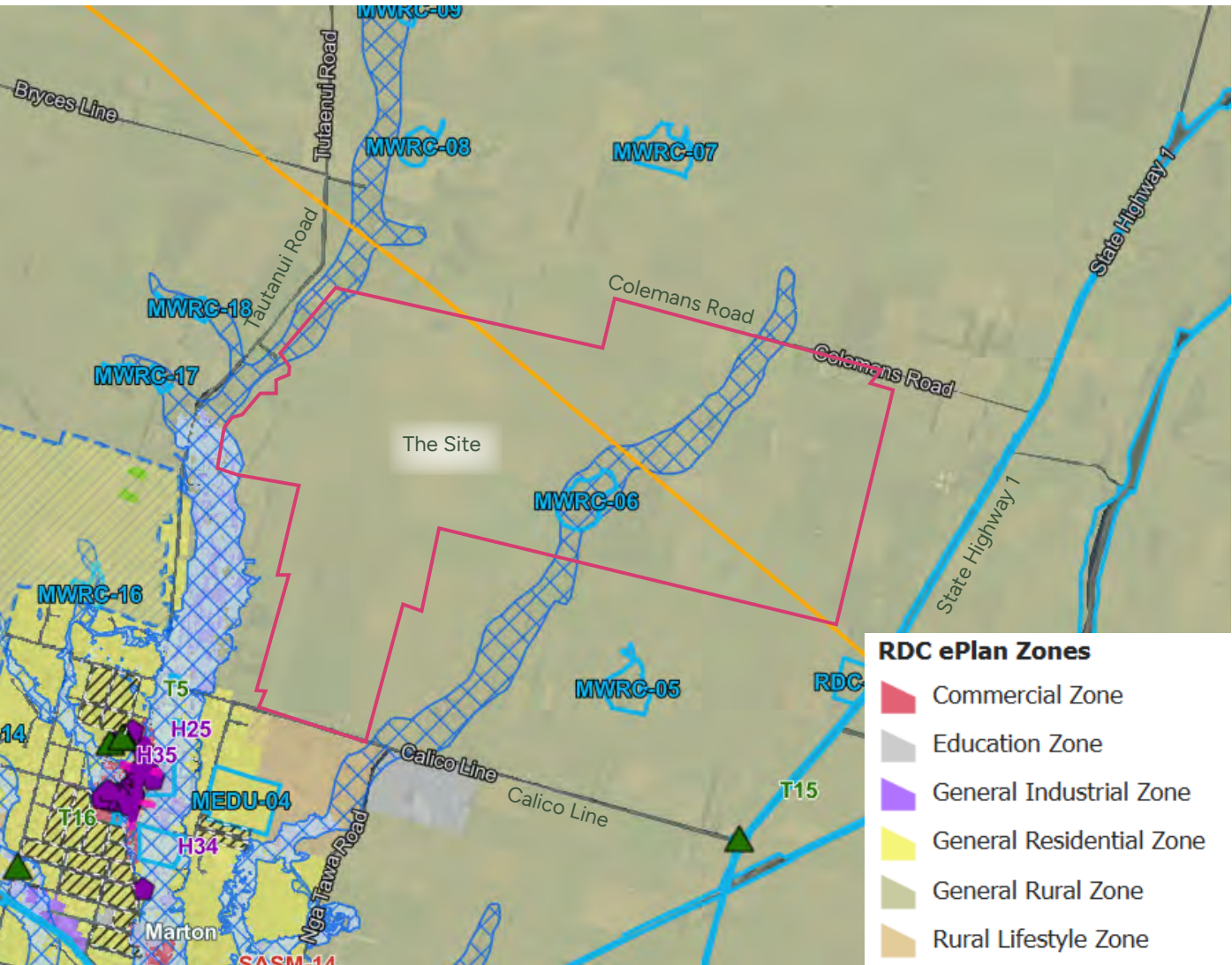


FIG 01: Rangitikei District Plan, Rangitikei District Council

¹ Para 1.04, Page 22. The New Zealand Institute of Landscape Architects (NZILA), Te Tangi a te Manu Aotearoa New Zealand Landscape Assessment Guidelines. July, 2022.



Secondly, the guideline presents three overlapping dimensions in the conceptualisation of the landscape, consisting of:

- **Physical:** the physical environment - its collective natural and built elements, patterns and processes;
- **Perceptual:** how we perceive and experience places, including views and visual qualities;
- **Associative:** the meanings and values we associate with places;

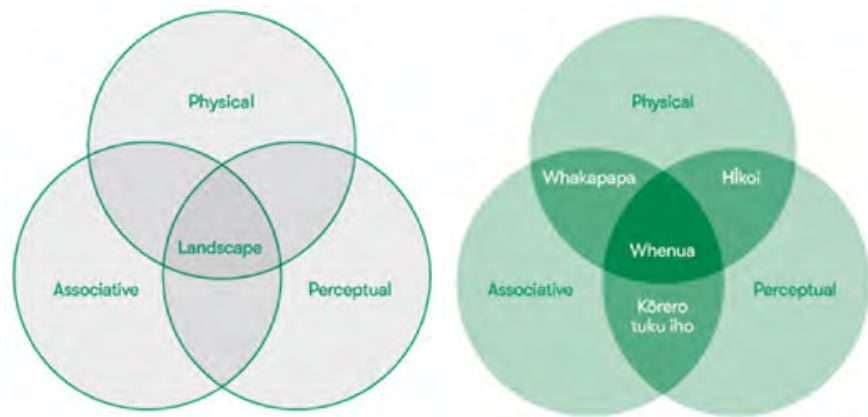


FIG 02: Landscape Conceptualised as the Intersection of Three Overlapping Dimensions. Source: NZILA Guidelines p72

‘Landscape’ is a term that describes an integrated whole. It is the combination of all attributes and phenomena that manifest in a particular place. In assessment terminology, ‘landscape’ encompasses or includes the likes of local and natural character, visual effects and public amenity.

Thirdly, and central to the overall process of landscape assessment (in general and specific to this assessment) is the notion that “to assess a landscape is to assess its character and values”. In summary:

“While landscape assessment methods vary, they are all based on landscape character and values. Character is an expression of the landscape’s collective attributes. Values are the reasons a landscape is valued. Values, though, are embodied in attributes. Effects are consequences for a landscape’s values resulting from changes to attributes. The landscape’s values are managed through managing such attributes.”²

In responding to the core tenets of the guideline described above, the following process / method has been applied.

1.2.1 Initial Desktop Analysis.

Following an initial project briefing by the project planner in January 2026 the following desktop analysis was undertaken:

- A desktop review of aerials, mapped overlays and site characteristics,
- Review of project technical drawings.
- Consideration of landscape relevant planning provisions, including:
 - i) Rangitikei District Plan

1.2.2 Initial Site Visit.

A site walkover was undertaken on 22nd January 2026 to appraise the selected site. An inspection of the surrounding landscape was also conducted.

Landscape factors considered on these site visits included:

- i) Character and value of the existing landscape including extent of vegetation, built form, boundary and street interface, public access and wider surrounds of the site including neighbouring properties.
- ii) The extent to which and from where the proposal will be seen.
- iii) The identification of potential viewing audiences, their type and locations.
- iv) Identification that some viewpoints are from private properties and that typical representative viewpoints would be required for key audiences where landowner consent was not attained or where views would be substantially the same as surrounding properties or public viewpoints.
- v) Preliminary consideration of the need for and type of planting to initially avoid and subsequently mitigate potential landscape effects.

1.2.3 Post Site Visit Design Process

Subsequent discussions with the planner and the wider design team included:

- i) Technical and operational constraints, opportunities, and risks in the context of intended planning and project outcomes.
- ii) Initial and indicative site design progression based on preliminary landscape and visual effect analysis and evolving operational constraints.
- iii) Proposals for planting as an integral part of the development to initially enhance the site and provide good amenity but also to avoid, and subsequently mitigate landscape effects.

1.2.4 Description of the Existing Landscape

Following the site visit a description of the existing rural landscape was prepared (see Section 3). It responds to the key NZILA guideline tenets identified above, specifically:

- i) **Physical Attributes** – human factors like, buildings (residential and working buildings), fence lines, power poles, roads and pedestrian paths. Also included are natural attributes, which on this site and local landscape include individual trees - native and exotic, shelterbelts, the adjacent river, farm dams, pasture and crops. In short, all of the ‘things’ that exist within the landscape. The physical attributes for this site are discussed in Section 3.1.
- ii) **Perceptual Attributes** – both direct sensory experience and broader interpretation through the senses. Perhaps most simply described as the ‘user experience’ of being in and moving through the landscape. Views are the most identifiable aspect of the perceptual landscape and for this landscape in particular, but other sensory aspects include tranquillity and ambient noise such as traffic and animal noise. The Perceptual attributes for this site are discussed in Section 3.2.
- iii) **Associative Attributes** – intangible elements that influence and that manifest as meaning – such as history, identity, customs, laws, narratives and activities specifically associated with the qualities of the landscape. In terms of this particular site, the ongoing activity associated with rural landscapes.

A summary statement, taking together all the existing attributes and identifying the overall landscape

² Para 5.01, Page 105. Ibid.



and natural character is provided, alongside the identification of those values that form the basis for the subsequent assessment of landscape effects.

Other technical information prepared to support the referral was relied on, namely engineering information for anticipated solar array layout, hydraulic and traffic design.

1.2.5 Assessment of Landscape Effects

A description of the nature and magnitude of change to existing landscape attributes and natural character is provided (see Section 4). This establishes a link between the proposal and the resulting changes that will likely occur in the landscape. It is worth noting that change in and of itself is not an effect, but rather the implications of that change on a particular landscape value that forms the basis for the assessment of effects.

An assessment of the effects on the identified landscape values of the site and relevant surrounding landscape has been undertaken. Chapter 6 of the NZILA guidelines describes the key considerations of an assessment of landscape effects and these have been incorporated in preparing this report.

Assessing effects on physical, associative and perceptual landscape dimensions is based on desktop research and on-site observations. The determination on the extent of visual audience was achieved by visiting surrounding areas and looking back at the site.

The assessment recognises the policy direction described in Section 1.3 below.

The short and mid term effects of construction are also considered and addressed.

Proposed landscape planting is integral to the project. Assessment and conclusions are based on the successful implementation of indicative mitigation and enhancement planting and their growth over time. A description of proposed landscape planting and design is provided in Section 2.

Consistent with the NZILA guidelines, a seven-point scale has been adopted in assessing landscape effects (including visual). This scale is included in **Appendix A** for reference. It is accompanied by an associated scale to assist decision makers determine whether effects are minor or otherwise.

1.3 Policy Context

This preliminary landscape assessment of effects has been informed by the landscape relevant objectives and policies of the planning framework, in particular the provisions of the Rangitikei District Plan related to landscape matters.

The site is located within the General Rural Zone and is not subject to any significant natural character or feature related overlays. The General Rural Zone framework seeks to maintain the area's primary production character by managing land use so that rural character and amenity values are not compromised. It places emphasis on preserving the largely open and unbuilt nature of the rural landscape and retaining the distinctive cultural landscapes associated with farming activities. The framework also requires that built development avoids or mitigates adverse effects such as shading on neighbouring land and provides appropriate separation distances between rural activities and rural residential units to minimise amenity effects and reverse sensitivity.

The Renewable Electricity Generation Chapter of the Rangitikei District Plan seeks to enable the development of renewable electricity generation while ensuring that adverse effects on landscape and visual amenity are avoided, remedied or mitigated through appropriate siting, design and layout, whilst recognising the technical and locational requirements of renewable energy infrastructure, and having regard to the local, regional and national benefits of renewable electricity generation.



2.0 PROPOSED DEVELOPMENT

2.1 Proposal Overview

FRV propose to construct, operate, maintain, and where necessary decommission, a utility scale solar farm, associated substation and battery energy storage system (BESS), ancillary activities and infrastructure, including provision for access to the site, to connect and supply electricity to the National Grid immediately to the north east of Marton, Rangitikei District. It is anticipated the proposal will include approximately 403ha of development area.

Specifically, the development is proposed to a 507ha mid-block area of rural properties located between Tūtaenui Road to the west, Calico Line to the south, State Highway 1 to the east and Colemans Road to the north.

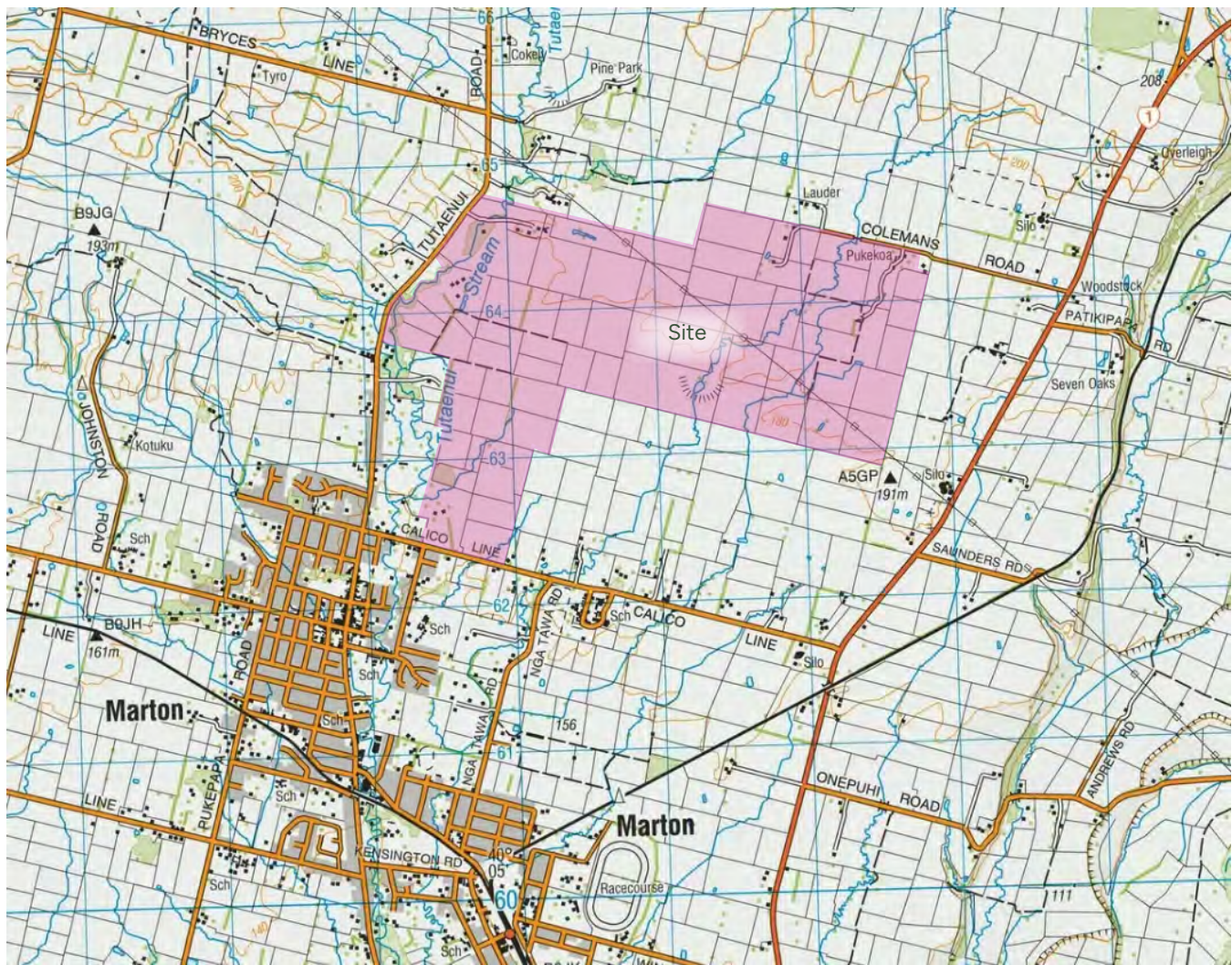


FIG 03: Site Location

2.2 Site Suitability

Following a due diligence process to determine suitability and technical feasibility the proposed site was selected. It was identified as an appropriate site as it will be able to effectively generate and distribute renewable electricity. Factors considered included the site's flat topography, exposure to high irradiance and sunshine hours, ease of access for construction, proximity and feasibility of connection to the National Grid.

2.3 Approach to Site Design

An initial landscape approach has been developed to mitigate the anticipated and known landscape and natural character adverse effects that have been identified from the work completed to date.

Specific elements of the landscape design response developed at this stage include:

- Approximately min. 10m set back of built form from all boundaries;
- Large area to the southern end of the site to be retained as pasture to Calico Line boundary and to other areas around the periphery of the site (approximately 67.5ha in total);
- Avoiding installation of structures within setbacks from watercourses identified by the project ecologist (5,10 and 20m);
- Location of larger built form to the centre of the site to minimise landscape effect and maximise assimilation into the existing rural landscape;
- Providing mid-block planting around the BESS and substation to minimise landscape effect and contextualise the built form into the landscape;
- Providing landscape planting of native shrubs and native and exotic trees to the boundaries to help assimilate the project into the rural context and avoid glint and glare.

2.4 Proposed Elements and Works

Refer Figs. 04, 05, 06, 07 and 08. The proposal consists of:

- **Solar Arrays**
These include approximately 300,000 solar photo voltaic (PV) panels, frames and potentially tracker motors. The arrays may be fixed in position or designed to track the progression of the sun. Either way they will be installed on ground mounted structures across the site. Each row of panels will be approximately 2- 6m apart and the frames will be made of either aluminium or galvanized steel with a rough matte grey finish. At full height the solar panels will have a maximum height of 4.5m but may be lower. Whilst the grazing of cattle and any other larger stock would cease in the project area, the development would support sheep grazing.
- **Cabling and Services**
Converter boxes will be placed on the panel structures throughout the site with electric cables linking sections of panels together. The low voltage cables will likely be placed in trenches located between the panels and the switch gear, low voltage transformers and inverters and above ground panels will be tethered to the tracking structure to eliminate loose wires. It is yet to be determined whether string or central inverters will be employed on this project.
- **Battery Energy Storage System (BESS) and Substation**
The BESS and substation will likely be located in the centre of the site toward the eastern side. The exact footprint is yet to be determined. The height of structures will be less than 8m. Key components of the substation would likely include:
 - i) The gantry / gantries would be up to 23m in height (to match the height of the existing lines).
 - ii) The majority of componentry is anticipated to be approximately 6-7m in height
 - iii) The substation will contain a 220kVa and 33MVA Transformer (110KV) and associated hazardous chemicals store to for oil for the transformer, coolant and batteries.
- **Ancillary Buildings**
Ancillary buildings will likely be required adjacent to the Substation and BESS in the centre of



the site. They will likely include an operations and maintenance (O&M) building which will house a control room / office to monitor the site, some storage and provide facilities for maintenance staff and gravelled yard for car parks (approximately 6 spaces). The ancillary building will likely be single storey and have a maximum height of 8m. The building will be painted a recessive colour – such as olive green and be similar in appearance to a farm shed.

- **Vehicle Access**

The site will likely be accessed from two entrances. The primary access will be from Calico Line to the south, with a secondary entrance for light vehicles from Colemans Road to the north. Vehicle accesses from the south will have a carriageway width of approximately 6m and gates setback from the road boundary. A network of 3 - 6m wide gravel tracks will be arranged across and around the site for ongoing maintenance.

- **Fencing**

Security fencing is proposed around the perimeter of the solar farm. This will likely consist of deer style fencing, with timber posts and mesh panels. Metal security fencing may also be used. Some extents of the security fencing may be covered with opaque green shade cloth to limit glare where identified as necessary. Existing livestock fencing will be largely removed from within the site to enable construction and operation of the solar farm.

- **Lighting and Security**

Low-level security lighting (motion sensor lighting) will be placed on the main buildings within the site and will be shielded from upward light spill. The final design of the lighting system will comply with district plan limits in terms of lux level. Final design will be confirmed at detailed design.

- **Earthworks**

Earthworks will be required to establish new internal access tracks and for trenching, cabling and earthing within the solar farm area. Existing site levels will generally remain although platforms will be required for the Substation and BESS yard areas.

2.5 Preliminary Landscape Design

The landscape design being developed for the project is intended to provide a vegetative context for the proposal. With reference to the ongoing operation of the solar farm, the landscape design is anticipated to introduce planting to address the balance between built and natural elements, screen and obscure views from outside the site retain all native vegetation and where possible retain existing exotic vegetation.

The following is currently proposed as part of the landscape response to the site:

- **Trees Retained**

All native trees on the site are anticipated to be retained as well as an area of recently planted native shrub revegetation along a watercourse toward the south of the site. Of particular note, is a cluster of native trees to the west of the site adjacent to the Tūtaenui Stream - these too will be retained. The majority of exotic trees on the site, including large mature trees, will be retained.

- **Vegetation Removal**

Some exotic shelterbelts located mid-site (approximately three) will likely be removed to enable rationale and uninterrupted placement of solar arrays.

- **Boundary Planting**

The landscape design is anticipated to include the installation of native shrubs to form vegetative screens to identified landscape sensitive locations. Native shrub planting will have a height of between 2 - 4m when mature. Native and Exotic trees are also proposed to be planted to

some boundaries to screen and curtail views of the solar farm. Native trees are to be planted in amongst the shrub planting, while exotic trees will be placed as continuous shelterbelts or in loose groups depending on the extent and proximity of the viewing audience and consideration of the immediate landscape character.

- **Planting to the BESS and Substation**

Native tree and shrub planting will likely be planted to the surrounds of the BESS and substation to screen the structures and increase vegetation on the site. These facilities will be located near Foley Stream and it is proposed that the banks of this stream will likely also be planted as part of the landscape mitigation strategy.

2.7 Construction Activities

The following section sets out an indicative construction methodology. The finalised construction methodology will be subject to confirmation by the appointed construction contractor and subject to a finalised Construction Management Plan.

Construction is anticipated to progress over a 18-24 month period (weather dependant) with a peak construction period of 4-6 months.

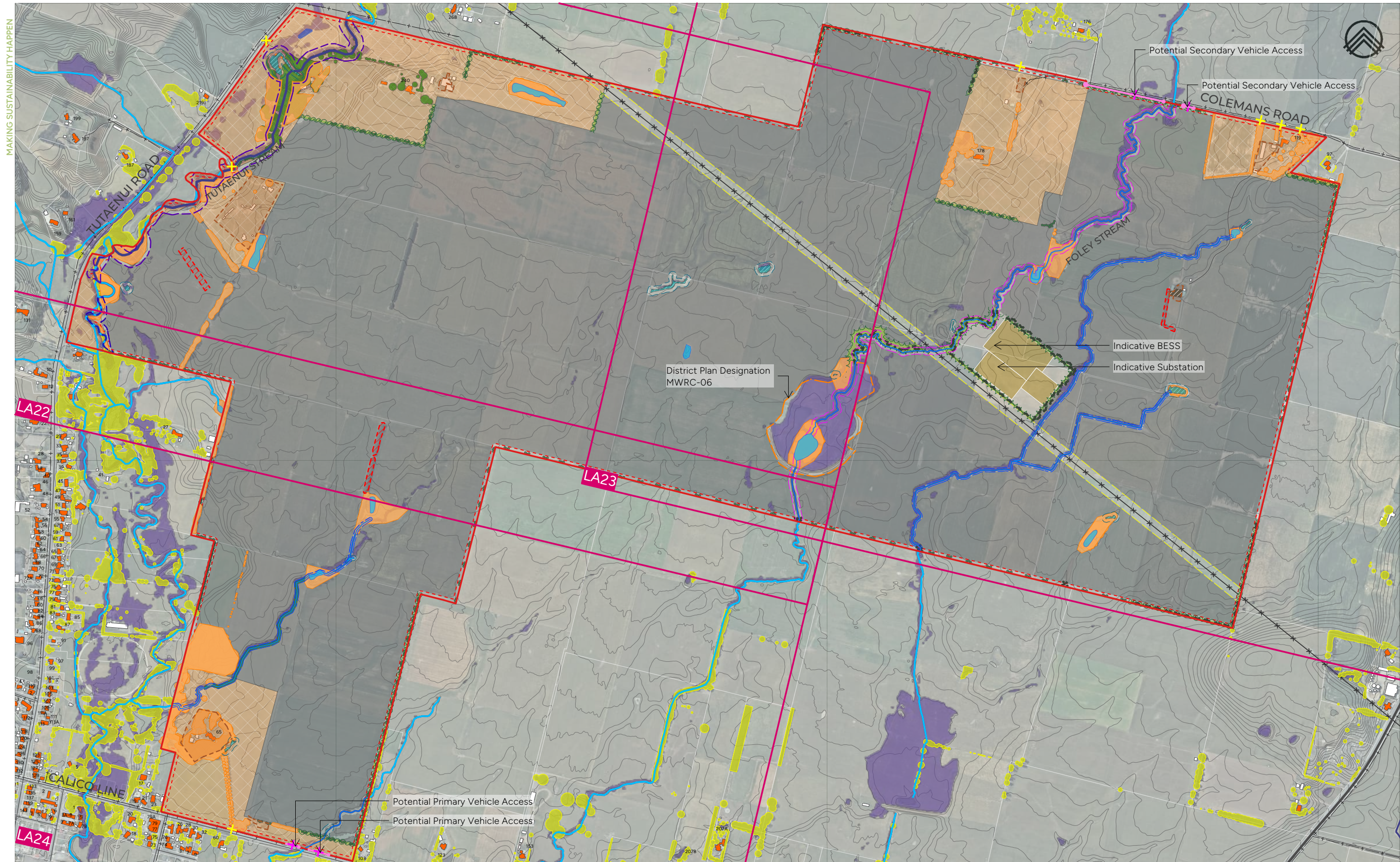
The works will generally follow the sequence set out below:

- Site establishment – Protection of trees for retention, demolition of any existing buildings, removal of vegetation, setting up environmental controls, construction of temporary site office, portable facilities and lay down yard;
- Site preparation – earthworks, ground improvement, cable laying, construction of access tracks;
- Boundary landscape treatments - fencing, shrubs and trees;
- Site construction – installation of solar arrays, cabling, construction of O&M facilities, BESS, substation and internal landscaping;
- Commissioning.

2.7.1 Construction Compound and Laydown Area

A construction compound and lay down area is anticipated within the development area toward the centre of the site. The compound and lay down area may be moved as construction of areas is completed. The lay down area will include (but not be limited to) site offices, lunch rooms, ablution facilities, carparking, storage and workshops. The will be disestablished following construction completion.





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RANGITIKEI SOLAR FARM INDICATIVE LAYOUT PLAN

SLR Project No: 810.032031.00001 Site Address: Calico Line, Coleman's Road, Tutaenu Road, Marton Client: FRV

Date: 11/05/2026
A3 Scale: 1:10,000

LA21

FIG 04: Plan of Anticipated Development



LEGEND

	Legal site boundary (approx. 506.85ha)		Watercourses external to site		Existing 11kv powerline (4m offset from centre of line)
	10m Boundary setback (perimeter track to be included in setback where necessary)		Intermittent stream		Existing 220kv National Grid line
	1m contour		Permanent stream		12m National Grid setback
	Existing non-residential building		Stream riparian setback - 5m		Existing access
	Existing residential dwelling		Stream riparian setback - 10m		Potential access
	Existing building to be removed		Stream riparian setback - 20m		District plan designation
	Land owner retention areas		Natural inland wetlands		Site flood risk constraints area - 0.5% AEP (HIGH)
	Existing vegetation		Existing farm dams		Identified HAIL locations
	Existing vegetation to be retained		Natural inland wetland setback - 10m		Potential solar development area
	Existing native vegetation - must be retained				
	Existing vegetation to be removed				
	Anticipated proposed native revegetation				
	Anticipated proposed native specimen tree				
	Anticipated proposed exotic specimen tree				

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RANGITIKEI SOLAR FARM

MASTER LEGEND

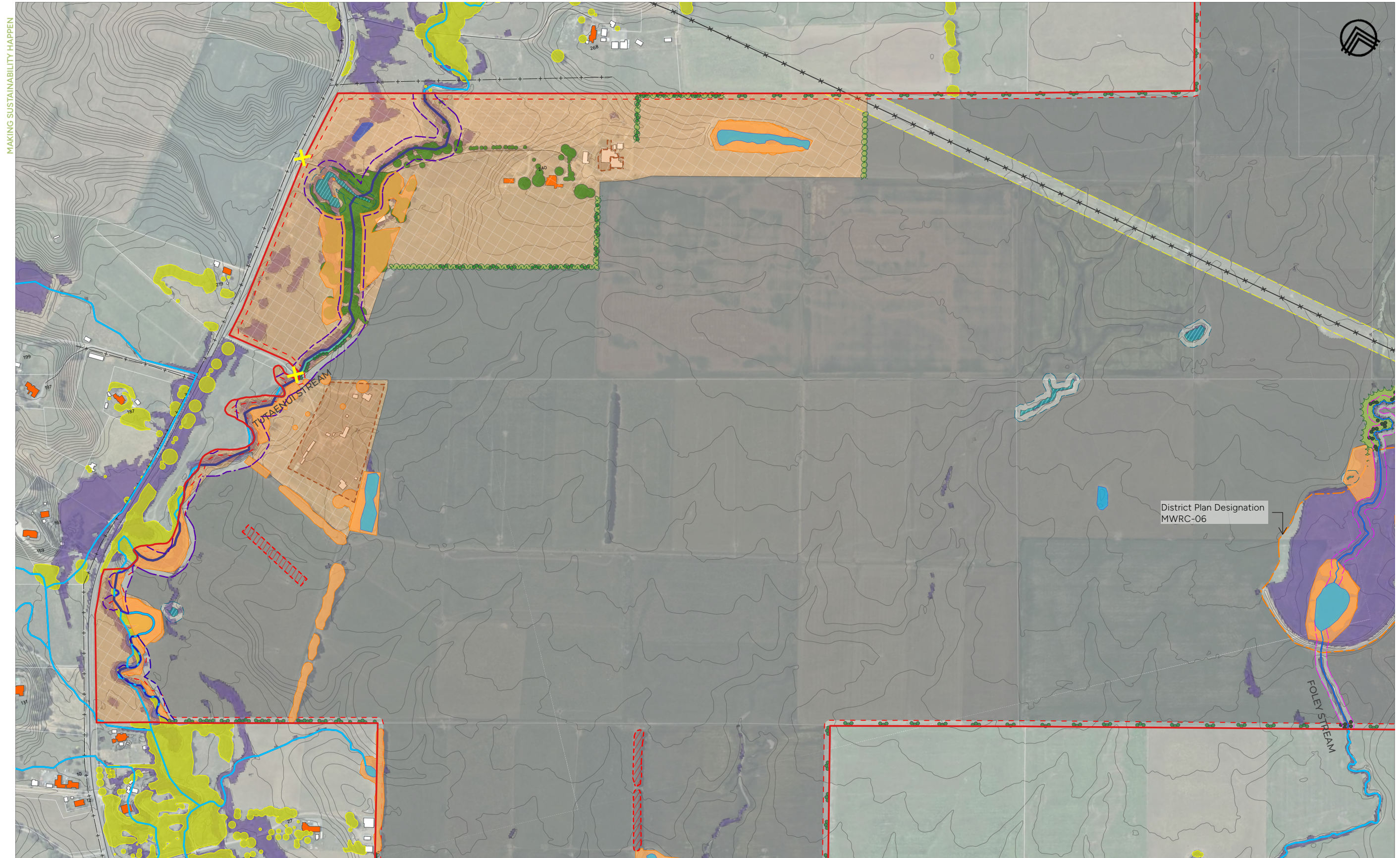
SLR Project No:	Site Address:	Client:
810.032031.00001	Calico Line, Colemans Road, Tutaenui Road, Marton	FRV

Date:
11/05/2026

LA20

FIG 05: Legend for Anticipated Development





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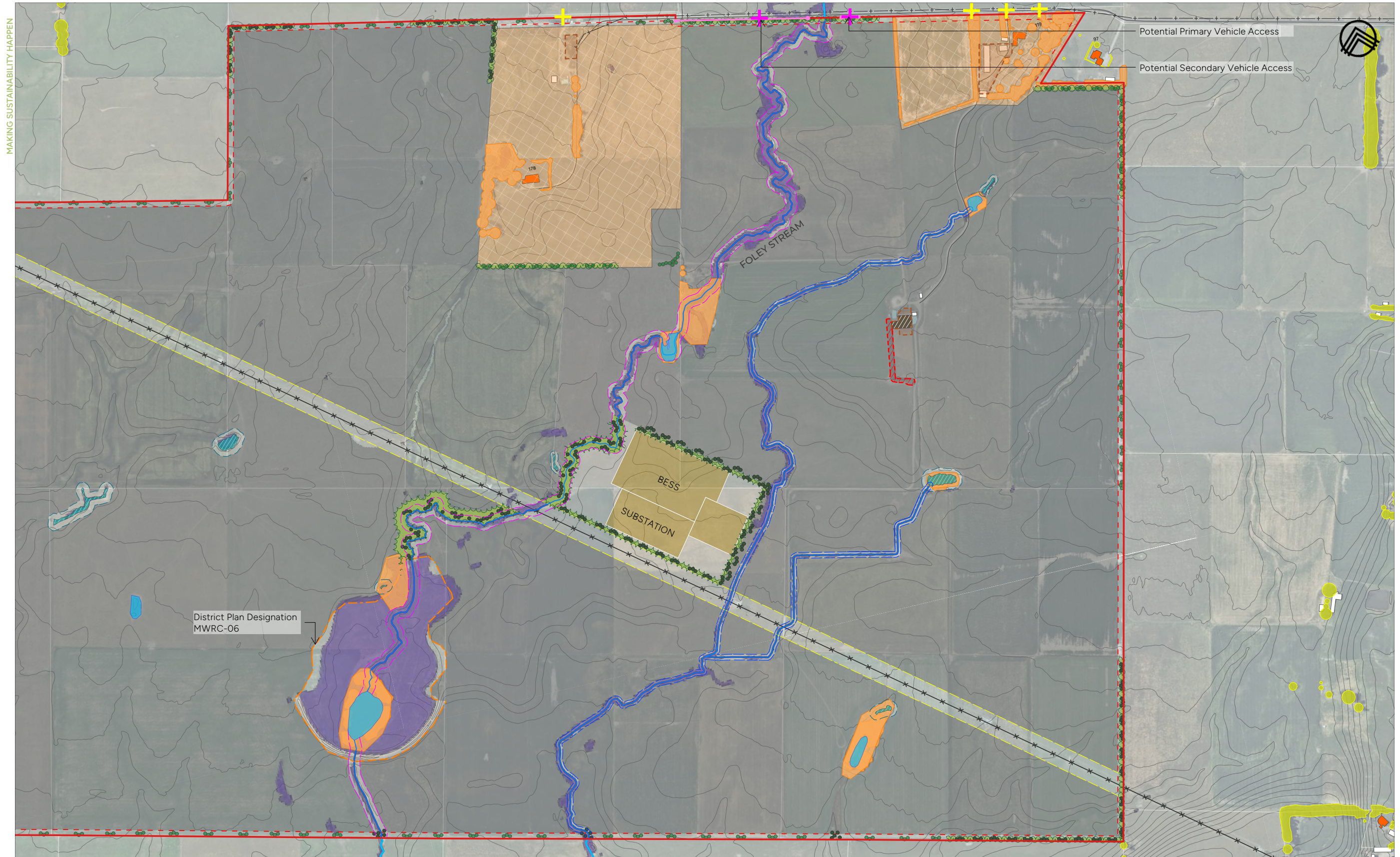
RANGITIKEI SOLAR FARM INDICATIVE LAYOUT - INSET 1

SLR Project No: 810.032031.00001 Site Address: Calico Line, Colemans Road, Tutaenui Road, Marton Client: FRV

Date: 11/05/2026
A3 Scale: 1:6,000

LA22

FIG 06: Detailed Plan 1 of Anticipated Development



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RANGITIKEI SOLAR FARM INDICATIVE LAYOUT - INSET 2

SLR Project No: 810.032031.00001 Site Address: Calico Line, Colemans Road, Tutaenui Road, Marton Client: FRV

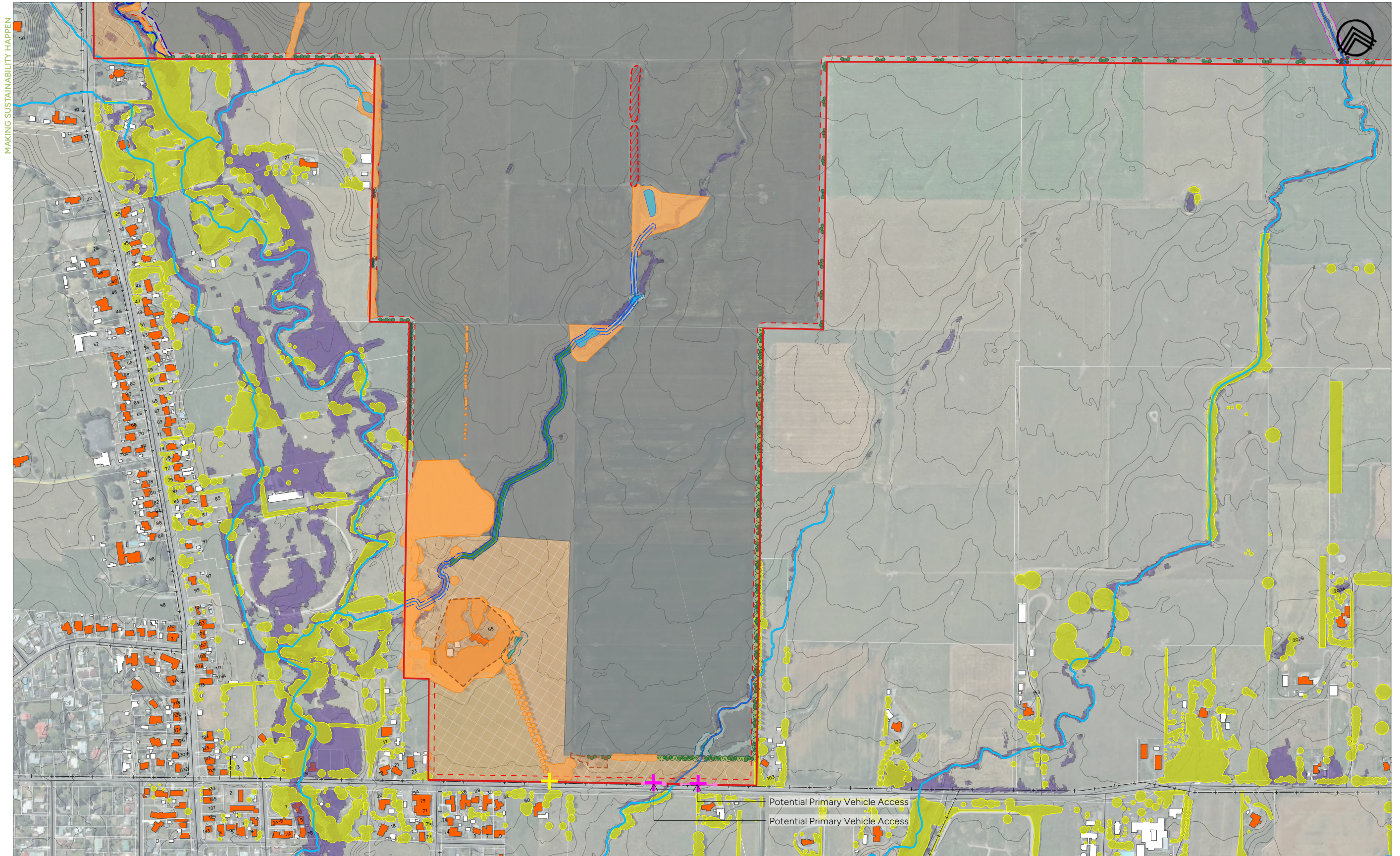
Date:
11/05/2026

A3 Scale:
1:6,000

LA23

FIG 07: Detailed Plan 2 of Anticipated Development





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RANGITIKEI SOLAR FARM INDICATIVE LAYOUT - INSET 3

SLR Project No: 810.032031.00001 Site Address: Calico Line, Colemans Road, Tutaenui Road, Marton Client: FRV

Date:
11/05/2026

A3 Scale:
1:6,000

LA24

FIG 08: Detailed Plan 3 of Anticipated Development



3.0 EXISTING LANDSCAPE CHARACTER

The following section describes the physical, perceptual and associative aspects of the site and local landscape. A summary of the landscape character and values of the site is provided.

3.1 Physical Aspects

3.1.1 The Site

The site is located on a mid block area of rural properties between Tūtaenui Road to the west, Calico Line to the south, State Highway 1 to the east and Colemans Road to the north. The combined site has an approximate size of 2 x 3 kms at its greatest extent or 507ha. The site is located on flat rural land immediately to the north east of Marton. The site is approximately 180m above sea level.

It is a working farm, and is used for both cropping, grazing cattle and sheep. Landcare Research, Manaaki Whenua records the soils of the site as Land Use Category (LUC) 3.

The site is predominantly covered in pasture and is largely flat. Fields to the northern and southern areas of the site were planted with crops at the time of the site visit. The site is divided by stock fences. Gravel and mud farm tracks run down fence lines to service and provide access to paddocks. Farm dams are located across the site at distance to each other.

The farm dams are surrounded by mainly mature exotic trees. Large exotic trees can also be found as curtilage planting around the four residential dwellings that are located around the site. Windbreaks of mature exotic trees are located to the western boundaries of the site, in limited locations mid-block and to the far north eastern corner. A cluster of native trees is located to the north western corner of the site adjacent and associated with the Tūtaenui Stream that forms a section of the site's western boundary.

A network of shallow depressions runs across the site in a natural and loose generally north east / south west alignment. Some of these depressions are overland flow paths while others are intermittent streams. They also include three small permanent streams, Foley Stream and two unnamed streams. Two of these are located to the east including Foley Stream and another to the south. The southern stream has recently been revegetated with small grade native planting stock.

Built form is also present on the site. This includes the aforementioned four residential dwellings, ancillary buildings and farm sheds clustered around these dwellings. Another farm building is located to the centre of the site toward the east. All built form is one - two storeys with the majority of buildings being single storey with gabled and hipped roofs. A notable built element of the site is the line of 220kv power pylons of the national grid that traverse the centre of the site. These have an approximate height of 45m.

Small built and manufactured objects associated with rural life can be found across the site. These include elements such as water troughs, tractors and farm utes.

3.1.2 Immediate and Wider Surrounds

Like the site, the terrain in the immediate and wider relevant landscape is predominantly flat with a general fall from north to south. In addition, a localised area rises in the north west to an elevation 20m above the site. To the east of the site the terrain drops down grassed slopes to State Highway 1 at a level approximately 10 - 15m below the site.

To the north of the site rural farm land extends for considerable distance. Pastoral fields interspersed by mature trees, exotic and native, occupy the 500m immediately to the north of the site. Five residential dwellings are located within this area at distance to one another. The power pylons of the

national grid continue their march across the northern landscape.

To the east, the landscape immediately adjacent, contains the same rural attributes present on the site, with pastoral fields divided by stock fences and the occasional large exotic tree continuing down to the edge of State Highway 1. A residential dwelling is located adjacent to the north eastern corner of the site and is surrounded by 10m tall exotic shelterbelts. A fertiliser factory with large scale built form, residential dwelling and cemetery are also located within 500m of the southern end of the eastern edge of the property. Rural character and pastoral fields extend eastward past State Highway 1.

To the south and eastern half of the site pastoral fields continue to Calico Line, located approximately 1km from the southern most edge of the eastern half of the site. Approximately ten residential dwellings are accessed off Calico Line and can be found north of the road within 1km of the southern boundary. Curtilage planting and shelterbelts of mature exotic trees, as well as large specimen trees are planted across this area. This same rural typology continues south of Calico Line. Notably to the southern side of Calico Line Nga Tawa Diocesan School is located. The school buildings are set back from the road edge by approximately 60m, behind a low brick wall and spacious lawn with mature deciduous trees.

To the western end of the site the property extends south to the edge of Calico Line. This area of Calico Line includes pastoral fields but is also in close proximity to the outer edges of Marton township. Existing residential dwellings, a commercial premise and dwellings under construction are sited opposite on the southern side of Calico Line. Dwellings are one to two storeys and interspersed with significant numbers of mature trees. Further west along Calico Road more built form is present as the landscape transitions from a rural setting to the township of Marton.

The western boundary of the site backs onto the rear yards of approximately forty dwellings located on the eastern side of Tūtaenui Road. These dwellings are located between 100 - 400m from the site. The dwellings form the northern edge of the Marton township. They are generally single storey with some two storey buildings. The rear yards are grassed and populated with mature, predominantly exotic trees between 8 - 30m in height. Further north on Tūtaenui Road built form becomes more separated and the landscape transitions from the township to a rural landscape.

In this area the Tūtaenui Stream forms the boundary of the site. This twists and turns following a natural course and is surrounded by mature trees both native and exotic deciduous. To the west of the stream on the eastern side of Tūtaenui Road two residential dwellings are located. These are on large countryside lots. Further north and on the other side of the road two dwellings are located on the elevated hill mentioned above. The area contains numerous trees.



FIG 09: Existing Landscape. Photograph Taken from Centre of the Site Looking Northeast



FIG 10: Existing Landscape. Photograph Taken from Centre of the Site Looking East



FIG 11: Existing Landscape. Photograph Taken from Centre of the Site Looking Southeast

3.2 Perceptual Aspects

3.2.1 The Site and Surrounds

The site and surrounds are part of a coherent rural landscape that stretches across much of the Rangitikei region. The perception of this landscape is of an expansive and vegetated terrain - flat fields of pasture with few buildings present. The landscape is dominated by vegetation (pasture, crops and trees). Memorable aspects of the site include its rural tranquillity and the movement and patterns created by the wind as the crops sway.

There are numerous mature trees spread across the landscape. Trees are planted in groupings and as individual specimens. They are a constant and dominant presence within the landscape and are in the background of all views in the area. In places shelterbelts are planted to property boundaries and these provide localised enclosure to adjacent properties and sections of the surrounding roads.

The site is located to the north east of Marton and as such the landscape does not feel isolated. Built form and infrastructural elements are present and noticeable to the immediate surrounds. Built form is a constant to the west of the site, on the edges of Marton township but does not dominate due to the presence of mature trees. Built form to the township is generally of standard quality and does not add positively to the values of the landscape. Dwellings and Nga Tawa Diocesan school, further from the town centre display aspects of architectural merit and surrounded by curtilage planting sit comfortably in the rural environment.

The power pylons across the site are sizeable structures and where visible detract from the otherwise picturesque qualities of the rural landscape. To the east of the site the constant traffic noise of State Highway 1 limits the tranquillity of the rural environment the closer one gets to the road. Other elements such as the fertiliser factory reveal the landscape as a working area with localised industrial elements. Built form and infrastructure elements add to the visual complexity of the landscape and provide subtle differences in rural character across the relevant landscape.

Overall the landscape is picturesque. An impression of a vegetated rural environment is obtained through the dominant elements of pastoral fields, crops and trees. However built form and infrastructure are notable elements of the surrounding landscape particularly to the western environs.

3.2.2 Visual Catchment

The site itself is privately owned and access is limited to the owners and farm workers. Experiences of the site for the general public are limited and available from the roadside. For the most part the public view of the site is transitory, experienced travelling along rural roads by vehicles at speed, on foot or by bicycle. Many of these views are seen at a distance.

Residential dwellings to the north, south, west and east of the site will have varying views of the site and proposal. Limited properties at higher elevations to the northwest may have views looking down and across part of the site. It is anticipated all views of the proposal will be partially obscured by terrain, existing on-site and intervening vegetation and proposed mitigation planting.

The visual catchment, for any potentially meaningful view of the proposal, is contained within a maximum of a 500m radius of the site to the west, north and east. However, within that 500m radius views of the site are frequently obscured by built form, topography and existing vegetation. Views of the proposal are not possible from State Highway 1 due to distance and topography. To the southeast, partial views of the proposal will be visible up to approximately 1km from the site's boundary

The visual catchment has been determined using a combination of desktop analysis and testing through on-site observations.

Photographs used for the assessment were taken with a 50mm lens, on a digital Canon SLR camera at public viewpoints identified on site as being representative of viewing catchments and audiences.

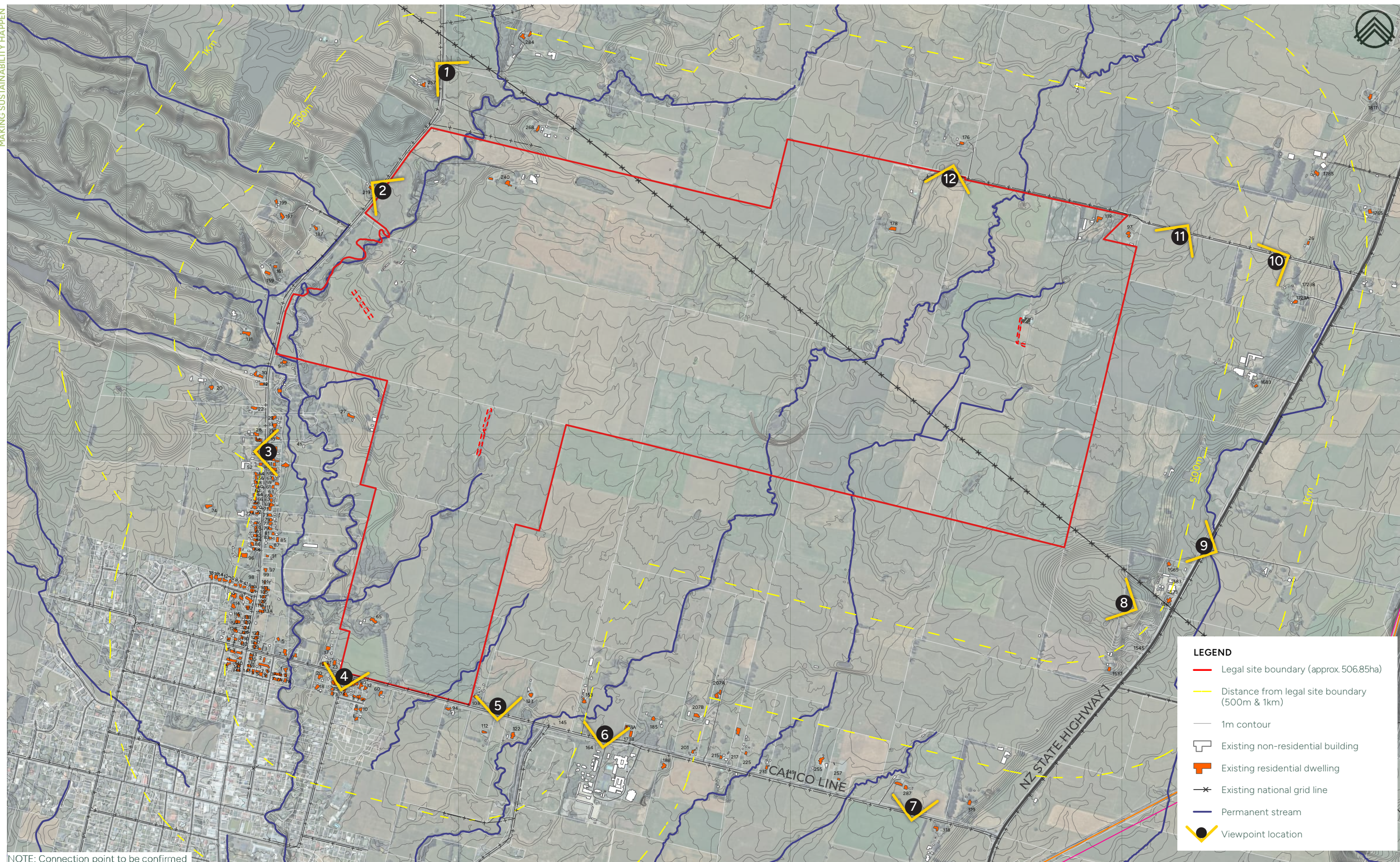
Photographs were taken throughout the day of the site visit. Photographs were stitched together using Adobe Lightroom software to represent the cylindrical field of view experienced by the human eye. Viewpoint locations and viewing audiences are listed in the table below and shown on the Site Context and Viewpoint Location Plan LA01. Detailed descriptions of views follow.

Viewing Audience	Viewpoint Location
Road users. Representative of views from residential properties at 267 and 284 Tūtaenui Road	Viewpoint 1 Roadside near 267 Tūtaenui Road
Road users. Representative of views from residential properties at 187 and 219 Tūtaenui Road	Viewpoint 2 Roadside near 219 Tūtaenui Road
Road users. Representative of views from residential properties at 45, 47, 49, 51, 53 Tūtaenui Road	Viewpoint 3 Roadside near 47 Tūtaenui Road
Road users. Representative of views from residential properties at 78 Bredins Line, 26, 28 and 30 Calico Line H and the commercial property at 22 Calico Line	Viewpoint 4 Roadside Cnr of Calico Line and Bredins Line
Road users. Representative of views from residential properties at 103, 112, 122 and 123 Calico Line	Viewpoint 5 Roadside near 112 Calico Line
Road users. Representative of views from residential properties at 153, 173A and 173B and Nga Tawa Diocesan School at 164 Calico Line	Viewpoint 6 Roadside near 164 Calico Line, Nga Tawa Diocesan School
Road users. Representative of views from residential property at 257 and 287 Calico Line. Somewhat representative of views from 318 Calico Line	Viewpoint 7 Roadside near 287 Calico Line
Representative of views for visitors from the western boundary of Mt View Cemetery.	Viewpoint 8 Western Boundary of Mt View Cemetery
Road users. Representative of views from residential property at 1585 State Highway 1 and the adjacent Fertiliser Factory	Viewpoint 9 Roadside near 1585 State Highway 1



Viewing Audience	Viewpoint Location
Road users. Representative of views from residential property at 26 Colemans Road	Viewpoint 10 Roadside near 26 Colemans Road
Road users. Representative of views from residential property at 97 Colemans Road	Viewpoint 11 Roadside near 97 Colemans Road
Road users. Representative of views from residential property at 176 Colemans Road	Viewpoint 12 Roadside near 176 Colemans Road





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RANGITIKEI SOLAR FARM

OVERALL SITE CONTEXT & VIEWPOINT LOCATION PLAN

SLR Project No: 810.032031.00001 Site Address: Calico Line, Colemans Road, Tutaenui Road, Marton Client: FRV Limited

Date: 08/05/2026
A3 Scale: 1:15,000

01

FIG 12: Site Context and Viewpoint Location Plan



3.2.3 Viewpoint Descriptions

Viewpoint 1

Roadside near 267 Tūtaenui Road

Distance from proposal: Approximately 200m from northern boundary

The viewpoint is at distance to the northern boundary of the site and is at the same relative level. The photograph shows a pastoral landscape with paddock stretching across most of the view. Cattle are visible in the mid ground. Tūtaenui Road can be seen across the foreground of the photograph. The road is lined with deciduous trees on the eastern side and power poles on the western side.

Views to the site are obstructed by intervening and on site mature trees that run across the width of the view. A power pylon of the National Grid can be seen above the trees in the background.

The photograph illustrates a pastoral and rural landscape dominated by vegetation (pasture and trees). Infrastructure is a noticeable element but distance between items and their scale in this complex landscape view mean that they are minor elements.

Extent of Proposed Site Behind Trees to the Background.



FIG 13: Viewpoint 1 Roadside near 267 Tutaenui Road



Viewpoint 2

Roadside near 219 Tūtaenui Road

Distance from proposal: Approximately 20m west of the western boundary.

The viewpoint is in close proximity to the western boundary of the proposed site. The photograph is taken from the roadside near a neighbouring property at the same relative level as the site.

Across the foreground of the photograph can be seen a dry paddock. This is separated from the road reserve by a stock fence. To the right hand side of the photograph a rural letterbox and purple agapanthus flowers frame the foreground. In the mid ground of the photograph mature trees growing on the banks of the Tūtaenui Stream are visible. They frame views to a gently rising section of the site. Single storey residential and farm buildings can be seen. Views to the sky are largely uninterrupted.

The photograph illustrates an expansive and largely flat pastoral landscape with vegetation (pasture and trees) dominant attributes. Built form is present but isolated.

Extent of Proposed Site to Background of Photograph.



FIG 14: Viewpoint 2 Roadside near 219 Tutaenui Road



Viewpoint 3

Roadside near 47 Tūtaenui Road

Distance from proposal: Approximately 500m west of the western boundary of the site

The viewpoint is at distance to the proposed site. The photograph is taken from the roadside near neighbouring properties at the same relative level as the site. The photograph shows a street view perspective looking east toward the site. Across the foreground of the photograph a domestic timber fence is visible alongside a power pole. In the mid ground residential dwellings are surrounded by mature trees that enclose the view. A glimpse to the fields of the site behind is afforded through a gap in the established trees.

The photograph illustrates a suburban scene with substantial trees evident but secondary elements to the built form and elements associated with suburban living. The photograph is typical of the glimpsed views to the site occasionally available along Tūtaenui Road near the township of Marton.

Extent of Proposed Site Behind Trees to the Background of the Photograph



FIG 15: Viewpoint 3 Roadside near 47 Tutaenui Road



Viewpoint 4

Roadside Cnr of Calico Line and Bredins Line

Distance from proposal: Approximately 20m south of the southern boundary of the site

The viewpoint is in close proximity to the southern boundary of the site and is at the same relative level. The photograph is taken from the south western end of the site looking north. A stock fence to the southern boundary is visible across the width of the photograph. The foreground of the photograph is dominated by the road surfacing of Calico Line. Power poles and lines cut across the view. The mid ground is occupied by pasture. The view is enclosed by mature trees that form curtilage planting and shelter belts.

The photograph illustrates a largely flat pastoral landscape enclosed by vegetation (pasture and trees). From this viewpoint the landscape is not perceived as expansive. Power poles are notable but do not dominate the view.

Extent of Proposed Site Behind Trees to the Background of the Photograph.



FIG 16: Viewpoint 4 Roadside Cnr of Calico Line and Bredins Line



Viewpoint 5

Roadside near 112 Calico Line

Distance from proposal: Approximately 100m from nearest eastern boundary.

The viewpoint is in close proximity to the eastern boundary of the site visible to the left of the photograph. The southern boundary of the site can be seen in the distance 1km from the viewpoint. Across the foreground of the photograph long grass, flowering agapanthus and long grass divide the viewer from expansive pastoral fields. A dark grey line of vegetation runs across the background of the photograph. Views of the sky are uninterrupted.

The photograph illustrates an attractive rural landscape of expansive fields framed by mature trees. Built form and infrastructure are absent from this expansive view.

Extent of Proposed Site to the Background of the Photograph.



FIG 17: Viewpoint 5 Roadside near 112 Calico Line



Viewpoint 6

Roadside near 164 Calico Line, Nga Tawa Diocesan School

Distance from proposal: Approximately 1km south of the southern boundary of the site.

The viewpoint is at distance to the proposed site and is at the same relative level. The photograph is taken from the south of the site looking north across adjacent rural properties. Stock fence wires and posts can be seen in the foreground. Pasture occupies the mid ground for the full extent of the photograph. The left hand side of the photograph is framed by mature trees and farm buildings. These extend across to a group of mature trees in the centre of the photograph. Hedgerows and mature trees frame the left hand side of the photograph. The site is glimpsed at the rear of the photograph largely obscured by the intervening trees in the centre of the view.

The photograph shows a rural landscape dominated by vegetation (pasture and trees). Farm buildings are present and add to the impression of a working rural landscape.

Extent of Proposed Site Behind Trees to the Background of the Photograph.



FIG 18: Viewpoint 6 Roadside near 164 Calico Line, Nga Tawa Diocesan



Viewpoint 7

Roadside near 287 Calico Line

Distance from proposal: Approximately 1km south of the southern boundary of the proposed site.

The viewpoint is at distance to the proposed site and is at the same relative level. Stock fence wires and posts can be seen in the foreground. Pasture occupies the mid ground for the full extent of the photograph. Mature exotic trees enclose the mid ground of the photograph and wrap around a residential dwelling and nearby farm sheds. Power poles can be seen to the left hand side of the photograph running toward the built form. Domesticated animals such as sheep, cattle and a horse are visible in the paddocks. The site is partially visible as a thin line of pasture to the background of the image between existing trees. A pylon of the National Grid is faintly visible against the sky.

The photograph shows a rural landscape where vegetation (pasture and mature trees) are dominant. Built form is a noticeable element but is isolated within expanses of fields.

Extent of Proposed Site Across the Background of the Photograph.



FIG 19: Viewpoint 7 Roadside near 287 Calico Line



Viewpoint 8

Western Boundary of Mt View Cemetery

Distance from proposal: Approximately 400m from eastern boundary of the site

The viewpoint is at distance to the site and is approximately 5m below the site. Long grass extends across the foreground of the photograph. At the time the photograph was taken the long grass partially obscures views to the site in the background. Above the long dry grass tree canopies are partially visible. A cluster of exotic trees frame the right hand side of the photograph, while a power pylon is dominant within the centre of the view.

The photograph illustrates a rural landscape where vegetation is dominant and is only interrupted by the vertical form of the power pylon.

Extent of Proposed Site to the Background of the Photograph



FIG 20: Viewpoint 8 Western Boundary of Mt View Cemetery



Viewpoint 9

Roadside near 1585 State Highway 1

Distance from proposal: Approximately 600m from the eastern boundary of the site

The viewpoint is at distance to the proposed site and is approximately 15m below the site level. The site is not visible as it is hidden behind the crest of sloping terrain. To the foreground of the photograph a farm gate and timber fence are visible. Pasture covers the sloping terrain that occupies the mid ground of the photograph. Sporadic exotic trees occupy the right hand side of the photograph. The left hand side of the photograph illustrates a cluster of residential dwellings with a large shelterbelt separating the built form from the adjacent pasture. Power poles are visible to the mid ground of the photograph, while a power pylon of the National Grid can be seen in the background behind the residential dwellings.

The photograph illustrates a rural scene, of open space with occasional built form elements.

Extent of Proposed Site Behind the Crest of the Sloping Terrain.



FIG 21: Viewpoint 9 Roadside near 1585 State Highway 1



Viewpoint 10

Roadside near 26 Colemans Road

Distance from proposal: Approximately 650m from eastern boundary of the site

The viewpoint is at distance to the proposed site and is at the same relative level. The foreground and mid ground of the photograph are dominated by cropped fields. An old farm barn is visible behind the crops to the left hand side of the photograph. A stock fence and Colemans Road can be seen receding into the distance on the right hand side of the photograph. Power poles line the right hand side of the road. Large mature trees and shelterbelts cut across the background of the photograph. The site is visible to the left hand side of the shelterbelt as a thin yellow line of pasture beneath a dark line of trees in the distance. A power pylon of the National Grid can just be discerned against the skyline.

The photograph illustrates an expansive and flat rural landscape with typical rural elements adding complexity and interest to the view.



FIG 22: Viewpoint 10 Roadside near 26 Colemans Road



Viewpoint 11

Roadside near 97 Colemans Road

Distance from proposal: Approximately 200m from the eastern boundary of the site.

The viewpoint is at distance to the proposed site and is at the same relative level. The foreground is occupied by pasture. Mature exotic and ornamental trees are visible to the right hand side of the photograph. They are part of curtilage planting to a residential dwelling visible in the mid ground of the photograph. This curtilage is further enclosed by a trimmed shelter belt. Trees are visible across the horizon line to the background of the expansive fields. Power pylons of the national grid can just be discerned against the skyline

The photograph illustrates a flat and expansive pastoral landscape with built form present.



FIG 23: Viewpoint 11 Roadside near 97 Colemans Road



Viewpoint 12

Roadside near 176 Colemans Road

Distance from proposal: Approximately 10m from the northern boundary of the site.

The viewpoint is in close proximity to the proposed site and is at the same relative level. The photograph illustrates large paddocks with different crops growing. A farm track bisects the fields and leads to the background of the photograph down the centre. Sporadic groupings of dark trees are visible across the horizon line in the background of the image. The power pylons of the National Grid can just be discerned against the sky.

The photograph illustrates a worked rural landscape with vegetation dominant. Built elements and infrastructure are recessive elements within the overall panorama.

Extent of Proposed Site.



FIG 24: Viewpoint 12 Roadside near 176 Colemans Road



3.3 Associative Aspects

Associative aspects of the site are limited. Whilst the area generally has a rich history of Māori settlement the site is not marked as including areas of heritage significance within the District Plan.

Cultural aspects relevant to landscape are awaiting the outcome of direct discussions with mana whenua and further input from them. However, based on preliminary and ongoing discussion with mana whenua no cultural aspects are believed to be associated with the site.

Associative aspects of the site reinforce the continued history of pastoral and rural activity.

3.4 Natural Character

The extent of Natural Character assessed for this project is restricted to the Tūtaenui Stream bordering part of the western boundary of the site, Foley Stream to the east and two further unnamed streams one to the toward the east and the other toward the south of the site.

The Tutaenui Stream demonstrates a degree of naturalness. The stream flows along a natural course between vegetated banks. Vegetation includes native shrub species, exotic and native trees as well as weed species such as blackberries and overgrown Kikuyu. At the time of the site visit the water appeared clear and free flowing over sediment based river beds. The stream passes through agrarian pasture and domestic yards which have replaced vegetation patterns of the ecological region. The surrounding catchment is modified through the removal of such vegetation. The stream is considered to have a **Moderate** level of natural character.

Foley Stream and the unnamed streams through the site flow along natural courses and have the ability to expand into natural flood planes at times of increased flow. However banks to the streams are covered in pasture or crops with no remnants of ecological planting patterns remaining. Foley Stream culminates in a farm dam which modifies the downstream flow patterns. The southern unnamed stream has recently been revegetated with small grade native plant stock. In time this is expected to increase the natural character of this stream. In general Foley Stream and the unnamed streams are considered to exhibit a **Low - Moderate** level of natural character.

3.5 Summary of Existing Landscape Character and Values

The site is located on a mid block area of rural properties between Tūtaenui Road to the west, Calico Line to the south, State Highway 1 to the east and Colemans Road to the north. The combined site has an approximate size of 2 x 3 kms at its greatest extent or 507ha. The site is located on flat rural land immediately to the north east of Marton.

It is a working farm, and is used for both cropping and grazing cattle and sheep. Landcare Research, Manaaki Whenua records the soils of the site as Land Use Category (LUC) 3.

The site is predominantly covered in pasture and is largely flat. Fields to the northern and southern areas of the site were planted with crops at the time of the site visit. Gravel and mud farm tracks run down fence lines to service and provide access to paddocks. Farm dams are located across the site at distance to each other.

Windbreaks of mature exotic trees are located to the western boundaries of the site, in limited locations mid-block and to the far north eastern corner. A cluster of native trees is located to the north western corner of the site adjacent and associated with the Tūtaenui Stream that forms a section of the site's western boundary.

Built form is also present on the site. This includes four residential dwellings, ancillary buildings and farm sheds clustered around these dwellings. Another farm building is located to the centre of the site toward the east. A notable built element of the site is the line of 220kv power pylons of the national grid that traverse the centre of the site. These have an approximate height of 45m.

Like the site, the terrain in the immediate and wider relevant landscape is predominantly flat with a general fall from north to south. In addition, a localised area rises in the north west to an elevation 20m above the site. To the east of the site the terrain drops down grassed slopes to State Highway 1 at a level approximately 10 - 15m below the site.

The site and surrounds are part of a coherent rural landscape that stretches across much of the Rangitikei region. The perception of this landscape is of an expansive and vegetated terrain - flat fields of pasture with few buildings present. The landscape is dominated by vegetation (pasture, crops and trees). Memorable aspects of the site include its rural tranquillity and the movement and patterns created by the wind as the barley crops sway.

The landscape does not feel isolated due to proximity to the township of Marton and infrastructural elements in the surrounding landscape. Built form and infrastructural elements are present and noticeable but despite their size do not dominate due to distance between built form and the presence of windbreaks and trees. Built form and infrastructure elements add to the visual complexity of the rural landscape.

Associative aspects of the site reinforce the continued history of pastoral and rural activity.

The Tūtaenui Stream is considered to have a **Moderate** level of natural character, while Foley Stream and the unnamed streams within the site are assessed as having a **Low - Moderate** degree of natural character.

Overall the landscape is picturesque. An impression of a vegetated environment is obtained through the dominant elements of pastoral fields and trees into which built elements and infrastructure are scattered. The existing landscape is assessed to have **Moderate** value.

4.0 LANDSCAPE EFFECTS

Anticipated effects of the proposal on the site and surrounding local landscape have been assessed using the three overlapping conceptual dimensions of landscape described in Section 1.2 - Methodology. Consistent with the NZILA guidelines the effect the proposal is anticipated to have on the values of the existing landscape character have been assessed.

4.1 Physical Effects

The proposal will result in a **Moderate-High** degree of adverse physical effect to the landscape character and values of the site and surrounds during construction and until proposed planting has established. Thereafter the proposal is assessed as having **Moderate** physical adverse effect to the landscape.

The impact of proposed earthworks on the site will be limited to the provision of internal roads, cable trenching, building platforms and panel footings. The overall form of the terrain will remain. Drainage will continue through existing natural depressions, intermittent and permanent streams. Given the large scale of the development earthworks are anticipated to include a substantial volume. However, despite this, lasting change will be limited with the existing land form and levels retained and drainage largely unchanged.

Limited numbers of mature exotic trees are proposed to be removed as a result of the proposal, however most existing mature exotic vegetation and all native vegetation is retained. Pasture will likely be damaged during construction but will be replaced at the end of construction. Large areas of pasture will be retained, and not built on at boundary locations around the site. Of particular note is the area of retained pasture adjacent to Calico Line at the southern most extreme of the proposal. Built form and infrastructure associated with the continuance of farming is proposed to remain to service the remainder of the site and complimentary farming activities. It is noted that sheep can continue to be grazed beneath the solar panels.

The introduction of generation infrastructure to the development areas, including large numbers of solar arrays will create the biggest change to the physical character of the site. The dominance of vegetation will be removed from the development areas. The development areas will change from entirely pastoral to infrastructural adversely affecting a value of the landscape.

While there will be limited excavation and no land form modification, and underlying physical attributes like hydrology, soil quality and pasture will remain, the proposal will essentially apply an 'infrastructural film' over the development areas. At site level the scale of the 403ha development will substantially reduce rural landscape character until mitigation planting has developed. However, the scale of the development is such that the proposed mitigation planting will lessen adverse effect but will not outweigh the fundamental effect to the landscape value of vegetative dominance.

Mitigation includes planting measures compatible with the existing landscape character. Shrubs, exotic and native trees are proposed around the boundaries of the site and around the BESS and substation. This planting will add a positive effect to the landscape by increasing native species diversity and habitat to site. Once this planting has established the physical effects, which are limited to the development areas, are anticipated to reduce.

Taking together these factors, both positive and adverse, the physical landscape effect is assessed as above.

4.2 Perceptual Effects

The introduction of infrastructural elements, across the 403ha development area, in a rural setting is considered to adversely affect perceptions of the rural landscape. If not mitigated it is considered that the proposed extent of built form would be detrimental to the coherence of the rural landscape. It would reduce the value of a landscape dominated by vegetation. Notwithstanding the existing power pylons, within the development area the landscape will be adversely affected by the extent of built form and views to numerous panel frames.

However, access to the development area will be limited to very few people (maintenance workers) and the wider site to a small number working the farm.

Proposed mitigation planting to the boundaries of the development areas is anticipated to be selected to mimic and compliment the tree planting and shelter belt patterns of the wider landscape. The introduction of planting will largely obscure views of the development from outside the site boundaries in the medium term. Given most surrounding public and private viewpoints are at distance proposed planting is anticipated to enable the solar farm to assimilate into the rural context in the medium term.

With the potential exception of neighbouring properties to the elevated terrain to the north west of the site all views are from level viewpoints. For these locations, views of the full development will not be possible. In the short term, before mitigation planting has established, views of the development will largely consist of a recessive grey / dark blue band across the background of viewpoints. This will not dominate the landscape or substantially reduce the perception of a vegetative context. It is noted that the panels are of comparatively low height. Impressions of an expansive flat landscape will remain for all viewpoints in the medium term. Views of the sky will remain uninterrupted. For these reasons the scale of the solar farm is considered to create limited adverse perceptual effects for the majority of views.

To the properties highlighted to the north west, it is anticipated that more of the solar farm will be visible and may occupy a larger proportion of available views. However it is also noted, that these views will still be partially obscured by existing and proposed vegetation and effect limited by the distance from the proposal

Construction machinery, such as cranes required for installation, concrete trucks, freight trucks and diggers will be visible during the construction period. Construction machinery will likely be more visually dominant than the finished proposal. Construction works will be visible to the same catchment as the proposal at various times during construction. For the period of time on site their presence, movement and noise will detract from the landscape values and level of tranquillity associated with the rural environment. However, considering the period of time on site, their effect has been aggregated into the determined overall perceptual and visual short term effect.

For the community living, visiting, working and moving past the site and surrounds the proposal and its construction will have limited adverse perceptual effects. The proposal will be visible to varying degrees depending on proximity and intervening vegetation in the short term but will be largely obscured and / or absorbed into the landscape in the mid to long term. Detailed description of the degree of effect from representative viewpoints is provided below. For the reasons outlined above adverse perceptual effects, including visual, to the landscape is assessed as **Low - Moderate** in the short term receding to **Very Low** in the medium term.

4.2.1 Visual Effect Assessment from Identified Representative Viewpoints

Visual effects that have informed the above rating have been assessed from representative public viewpoints in the surrounding landscape and are summarised in the table below.

Short term is defined by the anticipated duration mitigation planting will take to establish. Given installation size this is assumed to be 3-5 years.



Viewpoints and Viewing Audience	Visual Effect (Short Term)	Visual Effect (Mid - Long Term)
Viewpoint 1 Roadside near 267 Tūtaenui Road Road users. Representative of views from residential properties at 267 and 284 Tūtaenui Road	Negligible	Negligible
Viewpoint 2 Roadside near 219 Tūtaenui Road Road users. Representative of views from residential properties at 187 and 219 Tūtaenui Road	Low	Very Low
Viewpoint 3 Roadside near 47 Tūtaenui Road Road users. Representative of views from residential properties at 45, 47, 49, 51, 53 Tūtaenui Road	Low	Very Low
Viewpoint 4 Roadside Cnr of Calico Line and Bredins Line Road users. Representative of views from residential properties at 78 Bredins Line, 26, 28 and 30 Calico Line Hooker Road and the commercial property at 22 Calico Line	Low - Moderate	Low
Viewpoint 5 Roadside near 112 Calico Line Road users. Representative of views from residential properties at 103, 112, 122 and 123 Calico Line	Low	Very Low
Viewpoint 6 Roadside near 164 Calico Line, Nga Tawa Diocesan School Road users. Representative of views from residential properties at 153, 173A and 173B and Nga Tawa Diocesan School at 164 Calico Line	Low	Very Low

Viewpoints and Viewing Audience	Visual Effect (Short Term)	Visual Effect (Mid - Long Term)
Viewpoint 7 Roadside near 287 Calico Line Representative of views from residential property at 257 and 287 Calico Line. Somewhat representative of views from 318 Calico Line	Low	Very Low
Viewpoint 8 Western Boundary of Mt View Cemetery Representative of views for visitors from the western boundary of Mt View Cemetery.	Low	Very Low
Viewpoint 9 Roadside near 1585 State Highway 1 Road users. Representative of views from residential property at 1585 State Highway 1 and the adjacent Fertiliser Factory	Very Low	Negligible
Viewpoint 10 Roadside near 26 Colemans Road Road users. Representative of views from residential property at 26 Colemans Road	Very Low	Very Low
Viewpoint 11 Roadside near 97 Colemans Road Road users. Representative of views from residential property at 97 Colemans Road	Low - Moderate	Low
Viewpoint 12 Roadside near 176 Colemans Road Road users. Representative of views from residential property at 176 Colemans Road	Low	Very Low

4.3 Associative Effects

There are no recorded pre - European archaeology sites within the development area. Based on preliminary and ongoing discussion with mana whenua no cultural aspects are believed to be associated with the site.

The impacts on associative values are therefore limited to the restrictions the solar farm will have on the pastoral land use of the site. The introduction of the solar farm represents a departure from the post-European historical land use of the site through removal of the ability to graze stock and grow crops. It is, however acknowledged that rural productive use will still be possible through the grazing of sheep beneath the panels.

Given that the nature of change to rural use will be partial, it is assessed that there will be a **Low** degree of adverse effect on associative values.

4.4 Natural Character Effects

The proposed solar farm development is considered to have a **Low** adverse effect on the natural character of Tūtaenui Stream, Foley Stream and the two unnamed streams on site.

No physical adverse effects will occur to the identified water bodies nor their margins. Development will be set back at least 10m from the edge of the streams and in places further. Preliminary proposals for native vegetation to the banks of a section of Foley Stream is considered to provide positive natural character effect to that particular stream. The introduction of substantial areas of infrastructure within the general area of the streams is however considered to perceptually detract from the natural characteristics of the streams leading to the above assessment.

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5.0 CONCLUSION

5.1 Conclusion

Anticipated and known landscape effects of the proposal have been assessed in Section 4 of this report against the values of the existing landscape character as described in Section 3. The Assessment has considered effects on physical, perceptual including visual, and associative aspects of the landscape for the site and local surrounding landscape. The findings have considered the statutory context and construction activity.

The key findings of this preliminary assessment are:

- i) The site and immediate surrounds are collectively an attractive rural landscape with attributes of note but lack features of regional significance. For these reasons the existing landscape is assessed to have a **Moderate** landscape value.
- ii) The proposal will result in a **Moderate - High** degree of adverse physical effect to the landscape character and values of the site and surrounds during construction and until proposed planting has established. Thereafter the proposal is assessed as having **Moderate** physical effect to the landscape in the mid and long terms once planting has established.
- iii) The visual catchment, for any potentially meaningful view of the proposal, is contained within a maximum 500m radius of the site to the north, southwest, west, and east. It is contained within 1km to the southeast. However, within these distances views of the site are frequently obscured by built form, topography and existing vegetation. Only from the northwest are views anticipated to reveal more than partial glimpses or expanses of the solar farm.
- iv) For the community living, visiting, working and moving past the site and surrounds the proposal and its construction will have limited adverse perceptual effects. The proposal will be partially visible depending on proximity, intervening and proposed vegetation in the short, mid and long term but will be assimilated into the landscape in the mid term. For the reasons outlined above adverse perceptual effects, including visual, to the landscape are assessed as **Low - Moderate** in the short term receding to **Very Low** in the medium term.
- v) Detailed findings (Refer section 4.2.1) that contributed to the above assessment of perceptual effect were taken from representative viewpoints to the surrounds of the site. They found that visual effects ranged between **Low - Moderate** for two viewpoints to **Negligible** in the short term to **Low** to **Negligible** for all viewpoints in the mid and long term.
- vi) It is assessed that there will be a **Low** degree of adverse effect on the associative values of this landscape, predominantly arising from the limits the project will impose on continued rural activities and production.
- vii) The proposed solar farm development is considered to have a **Low** effect on the natural character of both the Tūtaenui Stream, Foley Stream and the two unnamed streams.

Taking these ratings together, the proposal is anticipated to have a **Moderate** degree of adverse effect to the landscape in the short term and **Low - Moderate** degree in the medium and long terms.



Appendix A

Degree of Effect

Degree of Effect

The seven-point assessment scale below combines the guidance provided in the NZILA Te Tangi a te Manu Aotearoa New Zealand Landscape Assessment Guidelines 2022, p151 and has been applied in assessing the degree of landscape effects that have been identified. The scale is used to determine adverse effects of the proposal. Positive effects of the proposal, where they occur, are simply described as positive effects.

Very Low	Low	Low - Moderate	Moderate	Moderate - High	High	Very High
Less than Minor	Minor	More than Minor				
						Significant

Associative Table for 'Minor' Test

For the purposes of notification determination, an adverse effects rating of Low - Moderate corresponds to a 'minor' adverse effects rating.

An adverse effects rating of 'Low' can correspond to a 'less than minor' adverse effects rating.

For further information with particular regard to rationalising these effects rankings in the context of RMA based decision making, please refer to pages 150 and 151 of the New Zealand Institute of Landscape Architects (NZILA), Te Tangi a te Manu Aotearoa New Zealand Landscape Assessment Guidelines July, 2022.

Definitions

The Concise Oxford English Dictionary provides the below definitions

- "Low: adjective - 1. Below average in amount, extent, or intensity."
- "Moderate: adjective - average in amount, intensity, quality or degree"
- "High: adjective - Great in amount, value, size, or intensity."

