

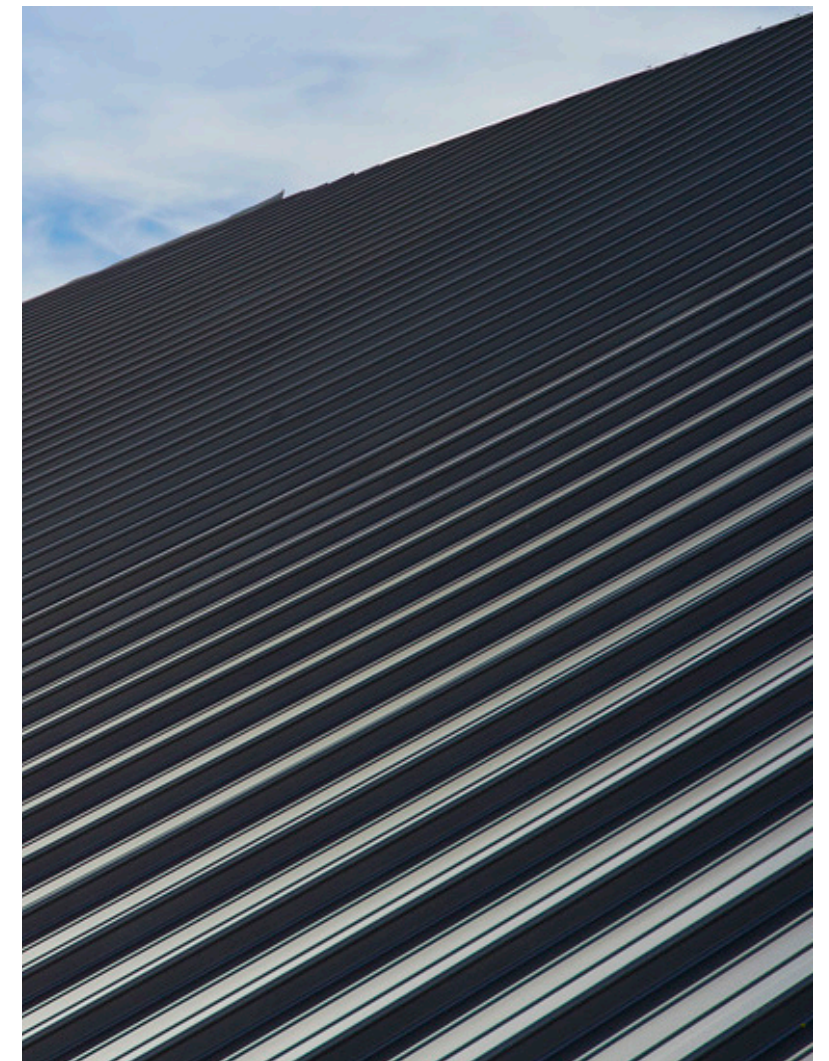
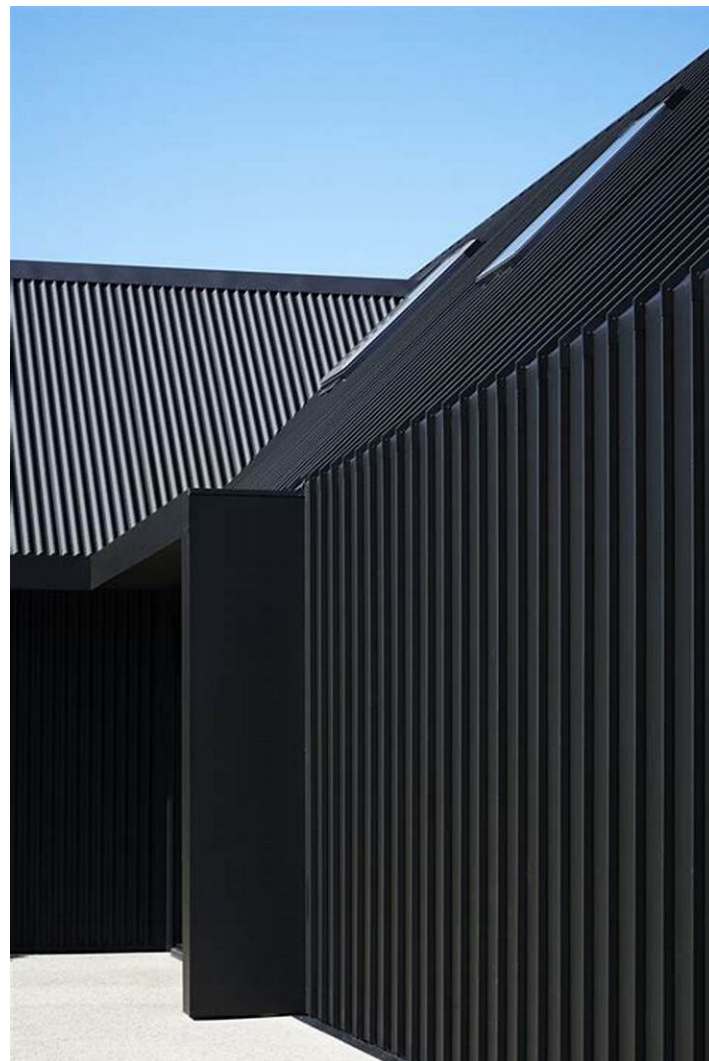
4.3 Design Inspiration - Driving Range Proposed Materiality

The main external cladding material to the driving range is proposed to be black standing seam metal cladding to create a rhythm and texture to break up a long facade.

The adjacent precedents have been selected to provide a flavour of some of the design inspiration which has helped to form our approach to the main driving range building.

Key characteristics:

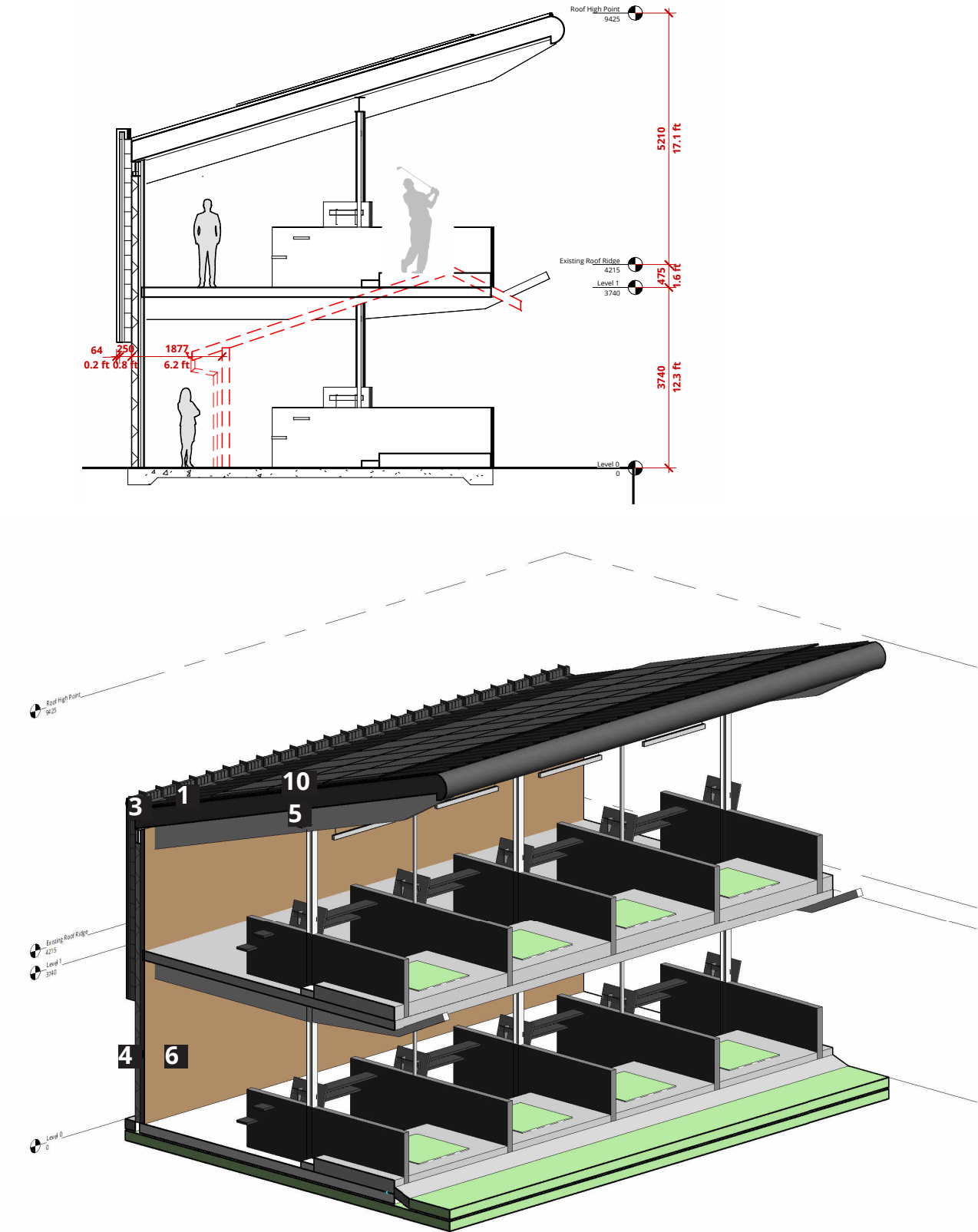
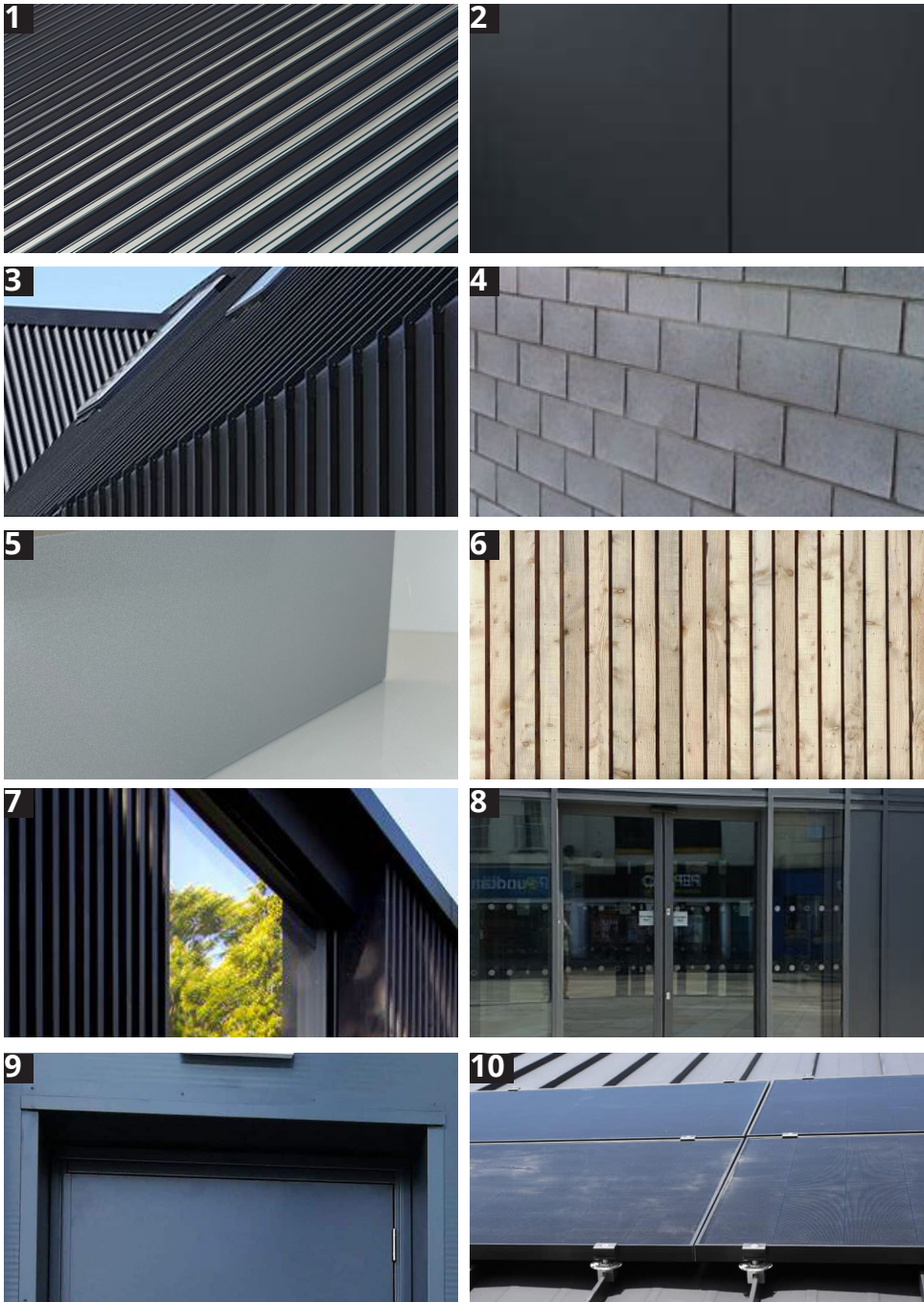
- Creating a simple object within a green landscape setting, highlighting the green openness which contrasts against the black
- Shaping the form of the roof to provide continuous texture
- Utilising a simple palette of materials
- Reflective sheen to cladding and glazing helps to reflect the nature of the green setting
- A mix of flat and textured panels help to highlight key features



Materials Key: DRIVING RANGE

- 1 Profiled standing seam rainscreen cladding - Black RAL 9005
- 2 Flat rainscreen cladding panels with secret fixings
- 3 Concealed gutter with associated rainwater goods - Black RAL 9005
- 4 Fair-faced blockwork walling
- 5 Primary Structure - Silver RAL 9006
- 6 Timber cladding
- 7 Slot window glazing
- 8 Automatic sliding glazed double doors with glazed side panel
- 9 Steel doorset - Black - RAL 9005
- 10 PV Solar Panel Array

NOTE: LIGHT FITTINGS & MEP EQUIPMENT INDICATIVE ONLY SUBJECT TO FINAL DETAILS



TYPICAL MATERIALITY DRIVING RANGE BAY STUDY

4.4 Design Inspiration - Adventure Golf Proposed Materiality

The adventure golf facility will be a Rovero greenhouse building - The proven retractable roof that offers high light roof covering that can fully open or close in less than 1 Minute.

Rovero greenhouses use very high-quality reinforced films that combine strength and long life with very high light transmission.

The adjacent precedent images show the rovero structure with closed and open roof configurations.

Key characteristics:

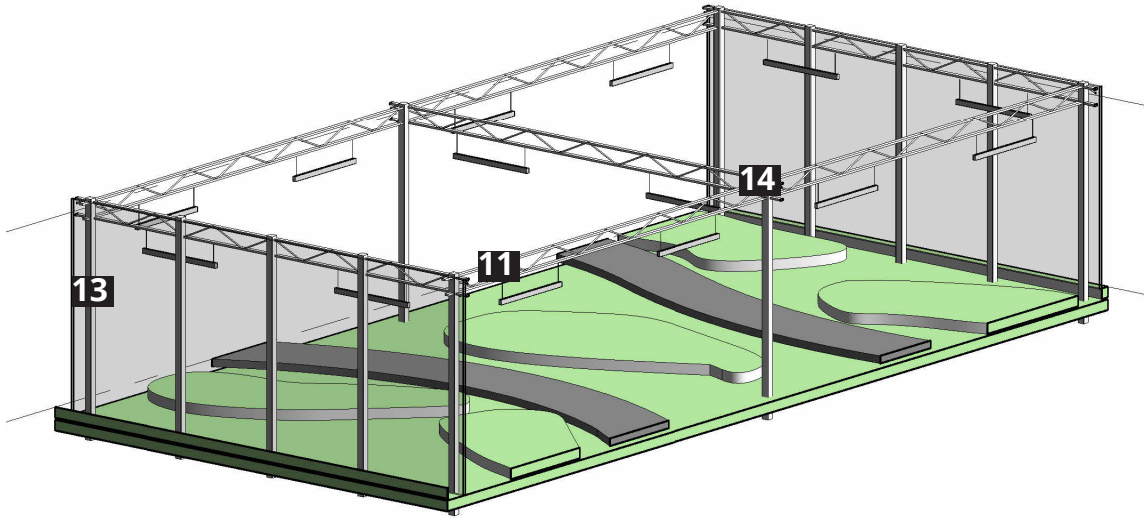
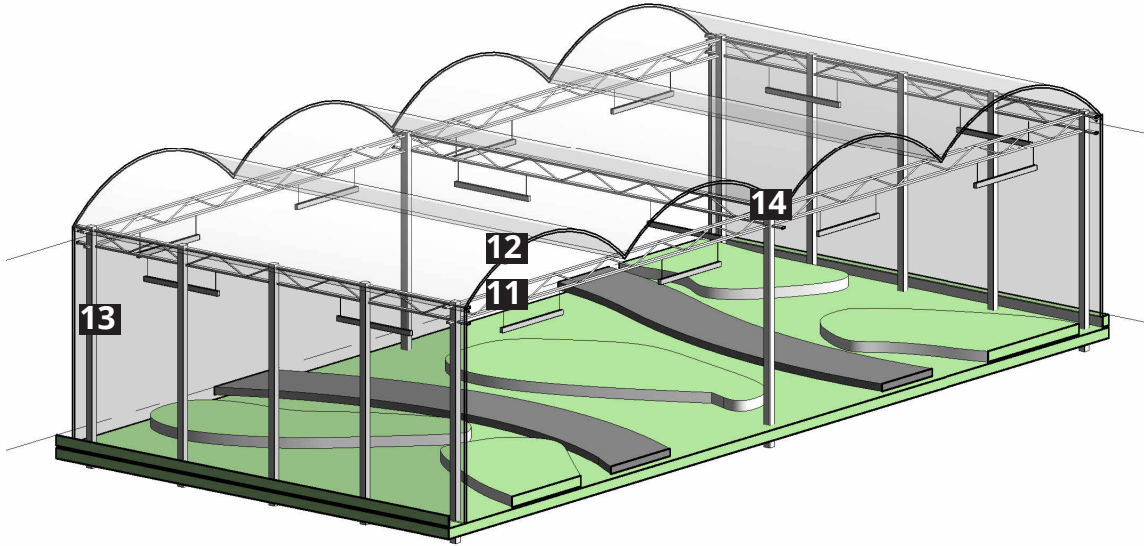
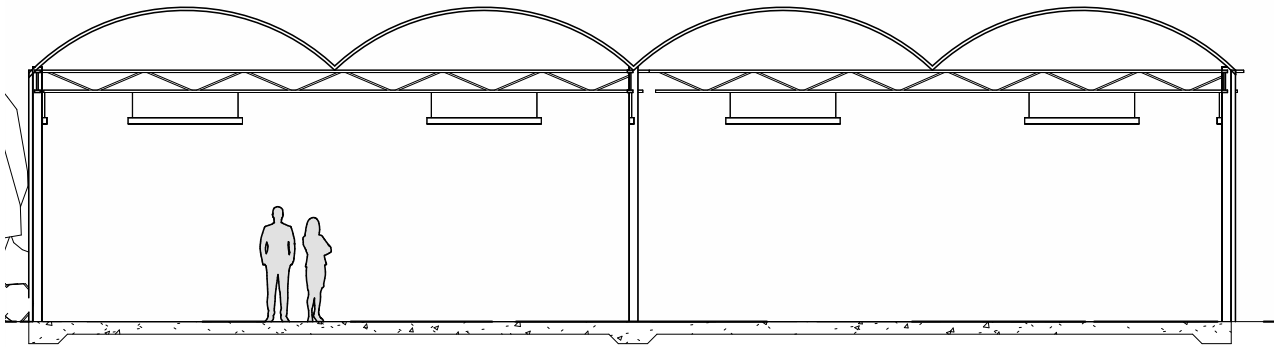
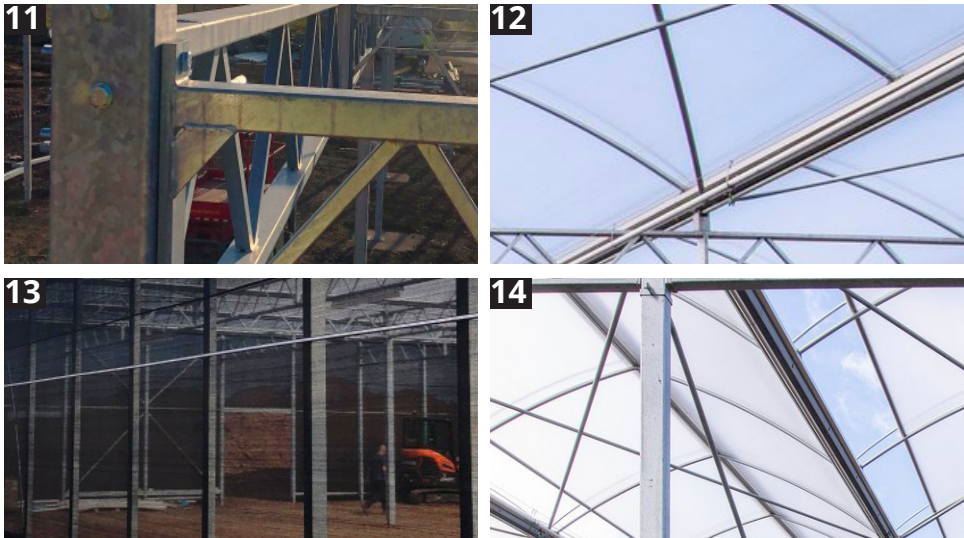
- Provides shelter to protect the adventure golf installations from weathering
- High light transmission is suitable for maintaining openness within a green setting
- Natural ventilation and daylighting provided and adjustable to suit a range of external conditions



Materials Key:
ADVENTURE GOLF

- 11 Primary structure - columns & lightweight trusses - Silver RAL 9006
- 12 Retractable reinforced poly roof covering
- 13 Mononet windbreak netting
- 14 Concealed gutters with associated rainwater goods - Silver RAL 9006

NOTE: LIGHT FITTINGS & MEP EQUIPMENT INDICATIVE ONLY SUBJECT TO FINAL DETAILS



TYPICAL MATERIALITY ADVENTURE GOLF BAY STUDY

	TOTAL AREA GEA (Gross External Area (m2))
Existing Area	890m ²
Existing Area Demolished	-186m ²
Adventure Golf Facility (includes ball servant area)	925m ²
New Driving Range Area	Ground Floor - 930m ² First Floor - 935m ² TOTAL - 1865 m ²
CUMULATIVE TOTAL	1714m ²

4.5 Landscape & Public Realm Design

The proposed landscape scheme aims to create an enhanced open green corridor to create an aesthetically pleasing experience for those who would utilise, visit and work at the facility, responding to the open character of the site and its surroundings.

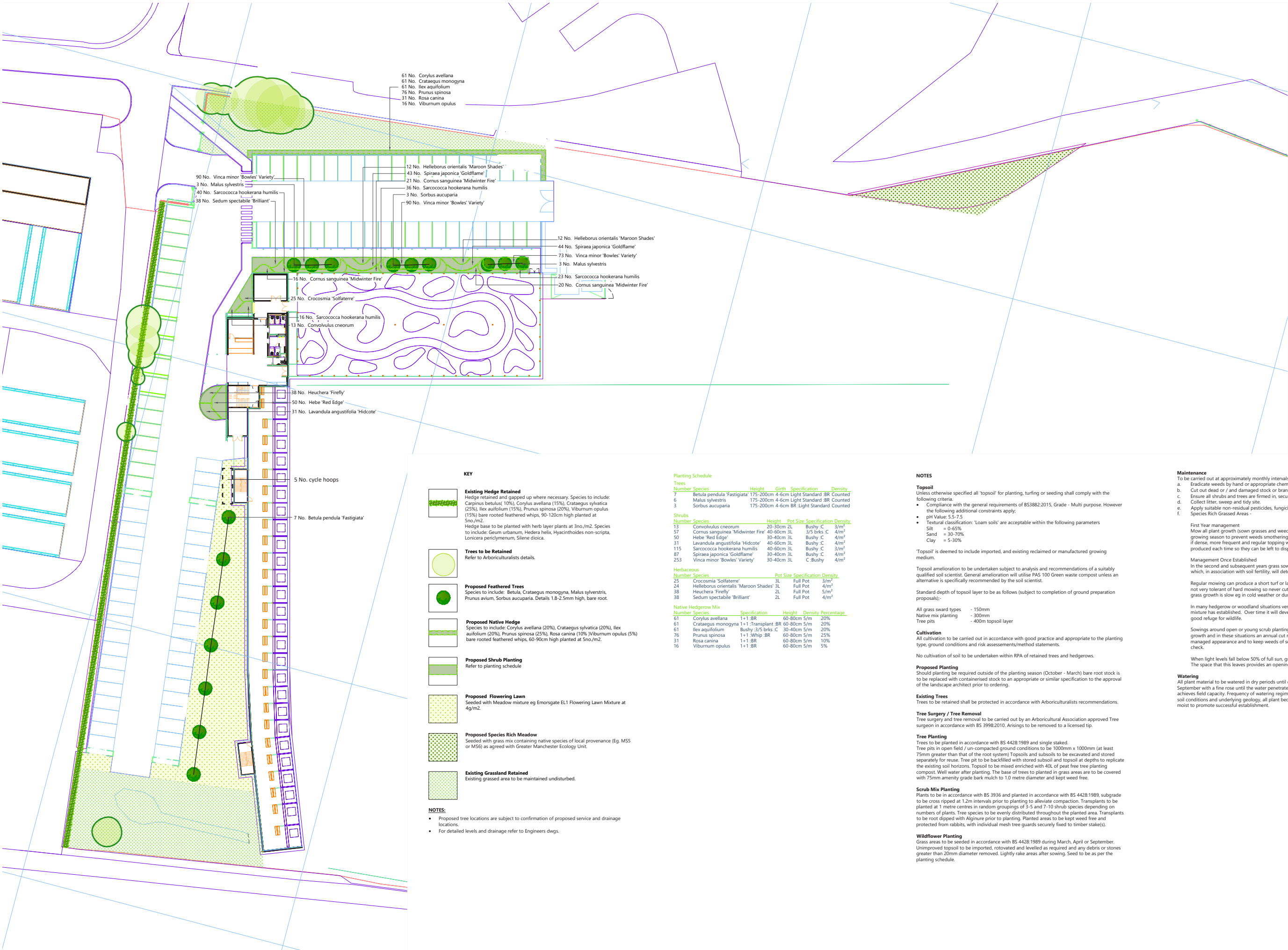
The design of the new landscape primarily includes a palette of hard and soft materials, key components are:

- surfacing of proposed hard landscape areas
- proposed tree, shrub and meadow vegetation to be planted
- treatment of site boundaries to be enhanced

Materials Key:
SITEWIDE

- | | |
|----|---|
| 15 | Hi-nets ballstop fencing - 30m high with galvanised support tower |
| 16 | GRP Anti Vandal Golf Ball Servant Housing - Green RAL 6005 |
| 17 | Jacksons Barbican Sliding Gates - Black RAL 9005 |
| 18 | Jacksons Barbican enhanced security fencing - Black RAL 9005 |
| 19 | Stainless steel bollards |
| 20 | 5 No. Cycle hoops |





KEY

Existing Hedge Retained
Hedge retained and gapped up where necessary. Species to include: Carpinus betulus(10%), Corylus avellana (15%), Crataegus sylvatica (25%), Ilex aquifolium (15%), Prunus spinosa (20%), Viburnum opulus (15%) bare rooted feathered whips, 90-120cm high planted at 5no/m2.
Hedge base to be planted with herb layer plants at 3no/m2. Species to include: Geum urbanum, Hedera helix, Hyacinthoides non-scripta, Lonicera periclymenum, Silene dioica.

Trees to be Retained
Refer to Arboriculturalists details.

Proposed Feathered Trees
Species to include: Betula, Crataegus monogyna, Malus sylvestris, Prunus avium, Sorbus aucuparia. Details 1.8-2.5mm high, bare root.

Proposed Native Hedge
Species to include: Corylus avellana (20%), Crataegus sylvatica (20%), Ilex aquifolium (20%), Prunus spinosa (25%), Rosa canina (10%) /Viburnum opulus (5%) bare rooted feathered whips, 60-90cm high planted at 5no/m2.

Proposed Shrub Planting
Refer to planting schedule

Proposed Flowering Lawn
Seeded with Meadow mixture eg Emorsgate EL1 Flowering Lawn Mixture at 4g/m2.

Proposed Species Rich Meadow
Seeded with grass mix containing native species of local provenance (Eg. MSS or MSS) as agreed with Greater Manchester Ecology Unit.

Existing Grassland Retained
Existing grassed area to be maintained undisturbed.

- NOTES:**
- Proposed tree locations are subject to confirmation of proposed service and drainage locations.
 - For detailed levels and drainage refer to Engineers dwgs.

Planting Schedule

Trees					
Number	Species	Height	Girth	Specification	Density
7	Betula pendula 'Fastigiata'	175-200cm	4-6cm	Light Standard	BR Counted
6	Malus sylvestris	175-200cm	4-6cm	Light Standard	BR Counted
3	Sorbus aucuparia	175-200cm	4-6cm	BR	Light Standard Counted

Shrubs					
Number	Species	Height	Pot Size	Specification	Density
13	Convolvulus cneorum	20-30cm	2L	Bushy	C 3/m²
57	Cornus sanguinea 'Midwinter Fire'	40-60cm	3L	3/5 brks	C 4/m²
50	Hebe 'Red Edge'	30-40cm	3L	Bushy	C 4/m²
31	Lavandula angustifolia 'Hidcote'	40-60cm	3L	Bushy	C 4/m²
115	Sarcococca hookerana humilis	40-60cm	3L	Bushy	C 3/m²
87	Spiraea japonica 'Goldflame'	30-40cm	3L	Bushy	C 4/m²
253	Vinca minor 'Bowles' Variety	30-40cm	3L	C.Bushy	4/m²

Herbaceous					
Number	Species	Pot Size	Specification	Density	
25	Crocus 'Solfaterre'	3L	Full Pot	3/m²	
24	Helleborus orientalis 'Maroon Shades'	3L	Full Pot	4/m²	
38	Heuchera 'Firefly'	2L	Full Pot	5/m²	
38	Sedum spectabile 'Brilliant'	2L	Full Pot	4/m²	

Native Hedgerow Mix					
Number	Species	Specification	Height	Density	Percentage
61	Corylus avellana	1+1 .BR	60-80cm	5/m	20%
61	Crataegus monogyna	1+1 .Transplant .BR	60-80cm	5/m	20%
61	Ilex aquifolium	Bushy 3/5 brks	C 30-40cm	5/m	20%
76	Prunus spinosa	1+1 . Whip .BR	60-80cm	5/m	25%
31	Rosa canina	1+1 .BR	60-80cm	5/m	10%
16	Viburnum opulus	1+1 .BR	60-80cm	5/m	5%

- NOTES**
- Topsoil**
Unless otherwise specified all 'topsoil' for planting, turfing or seeding shall comply with the following criteria.
- Compliance with the general requirements of BS3882:2015, Grade - Multi purpose. However the following additional constraints apply:
 - pH Value: 5.5-7.5
 - Textural classification: 'Loam soils' are acceptable within the following parameters
 - Silt = 0-65%
 - Sand = 30-70%
 - Clay = 5-30%
- 'Topsoil' is deemed to include imported, and existing reclaimed or manufactured growing medium.
- Topsoil amelioration to be undertaken subject to analysis and recommendations of a suitably qualified soil scientist. General amelioration will utilise PAS 100 Green waste compost unless an alternative is specifically recommended by the soil scientist.
- Standard depth of topsoil layer to be as follows (subject to completion of ground preparation proposals):-
- All grass sward types - 150mm
 - Native mix planting - 300mm
 - Tree pits - 400mm topsoil layer
- Cultivation**
All cultivation to be carried out in accordance with good practice and appropriate to the planting type, ground conditions and risk assessments/method statements.
- No cultivation of soil to be undertaken within RPA of retained trees and hedgerows.
- Proposed Planting**
Should planting be required outside of the planting season (October - March) bare root stock is to be replaced with containerised stock to an appropriate or similar specification to the approval of the landscape architect prior to ordering.
- Existing Trees**
Trees to be retained shall be protected in accordance with Arboriculturalists recommendations.
- Tree Surgery / Tree Removal**
Tree surgery and tree removal to be carried out by an Arboricultural Association approved Tree surgeon in accordance with BS 3998:2010. Arisings to be removed to a licensed tip.
- Tree Planting**
Trees to be planted in accordance with BS 4428:1989 and single staked.
Tree pits in open field / un-compacted ground conditions to be 1000mm x 1000mm (at least 75mm greater than that of the root system) Topsoils and subsoils to be excavated and stored separately for reuse. Tree pit to be backfilled with stored subsoil and topsoil at depths to replicate the existing soil horizons. Topsoil to be mixed enriched with 40L of peat free tree planting compost. Well water after planting. The base of trees to be planted in grass areas are to be covered with 75mm amenity grade bark mulch to 1.0 metre diameter and kept weed free.
- Scrub Mix Planting**
Plants to be in accordance with BS 3936 and planted in accordance with BS 4428:1989, subgrade to be cross ripped at 1.2m intervals prior to planting to alleviate compaction. Transplants to be planted at 1 metre centres in random groupings of 3-5 and 7-10 shrub species depending on numbers of plants. Tree species to be evenly distributed throughout the planted area. Transplants to be root dipped with Alginate prior to planting. Planted areas to be kept weed free and protected from rabbits, with individual mesh tree guards securely fixed to timber stake(s).
- Wildflower Planting**
Grass areas to be seeded in accordance with BS 4428:1989 during March, April or September. Unimproved topsoil to be imported, rotovated and levelled as required and any debris or stones greater than 20mm diameter removed. Lightly rake areas after sowing. Seed to be as per the planting schedule.

- Maintenance**
To be carried out at approximately monthly intervals to include the following:
- Eradicate weeds by hand or appropriate chemical means.
 - Cut out dead or / and damaged stock or branches, prune as required.
 - Ensure all shrubs and trees are firmed in, securely staked and tied.
 - Collect litter, sweep and tidy site.
 - Apply suitable non-residual pesticides, fungicides, fertilisers and water as required.
 - Species Rich Grassed Areas -
- First Year management**
Mow all plant growth (sown grasses and weeds) regularly to 40-60mm throughout the first growing season to prevent weeds smothering the slower-growing grasses. Remove cuttings if dense, more frequent and regular topping will minimise the amount of toppings produced each time so they can be left to disperse.
- Management Once Established**
In the second and subsequent years grass sowings can be managed in a number of ways which, in association with soil fertility, will determine the character of the grassland.
- Regular mowing can produce a short turf or lawn. Grasses growing in shade are, however, not very tolerant of hard mowing so never cut shorter than 30mm and avoid mowing when grass growth is slow eg in cold weather or during dry spells.
- In many hedgerow or woodland situations very little management is required once the mixture has established. Over time it will develop an open, tussocky structure which is a good refuge for wildlife.
- Sowings around open or young scrub planting with higher light levels will produce more growth and in these situations an annual cut mid summer may be worthwhile for a more managed appearance and to keep weeds of semi-shade such as nettles and brambles in check.
- When light levels fall below 50% of full sun, grasses decline in both number and vigour. The space that this leaves provides an opening for woodland herbs to thrive.
- Watering**
All plant material to be watered in dry periods until established during April through to September with a fine rose until the water penetrates the topsoil to at least 5cm depth and achieves field capacity. Frequency of watering regime to be determined by weather conditions, soil conditions and underlying geology, all plant beds to be watered to ensure soil is consistently moist to promote successful establishment.

4.6 Biodiversity & Climate Resilience

The scheme will incorporate large areas of green infrastructure to provide biodiversity benefits, reflect the visual character of the open area and increase the sites climate resilience. Existing landscape features such as native hedgerows, scattered trees, formed ditches & attenuation pond will be retained further helping to maintain the open character.

With these green infrastructure and ecological interventions, the BNG habitat units score within the site will be increased by:
157.17% habitat units
10.34% hedgerow units

This will greatly improve the provision for wildlife and so the overall biodiversity of the site will be improved by the landscape proposals.

4.7 Sustainability

The proposed development looks to incorporate several sustainable features including:

- Surface water drainage
- PV solar array to roof
- Battery storage
- Natural daylighting
- Promoting, protecting and enhancing biodiversity and green infrastructure
-

4.8 Inclusive Access

Accessibility for all is an important aim which is fully supported by the client and design team governed by the Equality Act 2010, Building Regulations Approved Doc M and best practice from BS 8300.

Vehicle access is provided and extended totalling 102 spaces 5 of which are accessible and located near the main entrance. Cycle parking is also provided.

Improved pedestrian access from Heywood Old Road provides level access to the main entrance.

Priority will be given to those users with disabilities at ground floor level and the adventure golf facility will be accessible.

Finishes & WCs will be designed to meet Doc M & BS requirements, informing the development of the next design stages.

4.9 Security

Site security is an important aspect of the design to protect the business. The guidance received in the crime impact statement will be incorporated within the next design stages.

Proposed boundaries will be enhanced and replaced over time to provide extra security.

Operation, CCTV & alarms will further protect and provide the necessary surveillance to monitor the security of the building.

Careful external lighting will ensure key areas are illuminated at night, and entrances will be illuminated.

4.10 Advertising & Signage

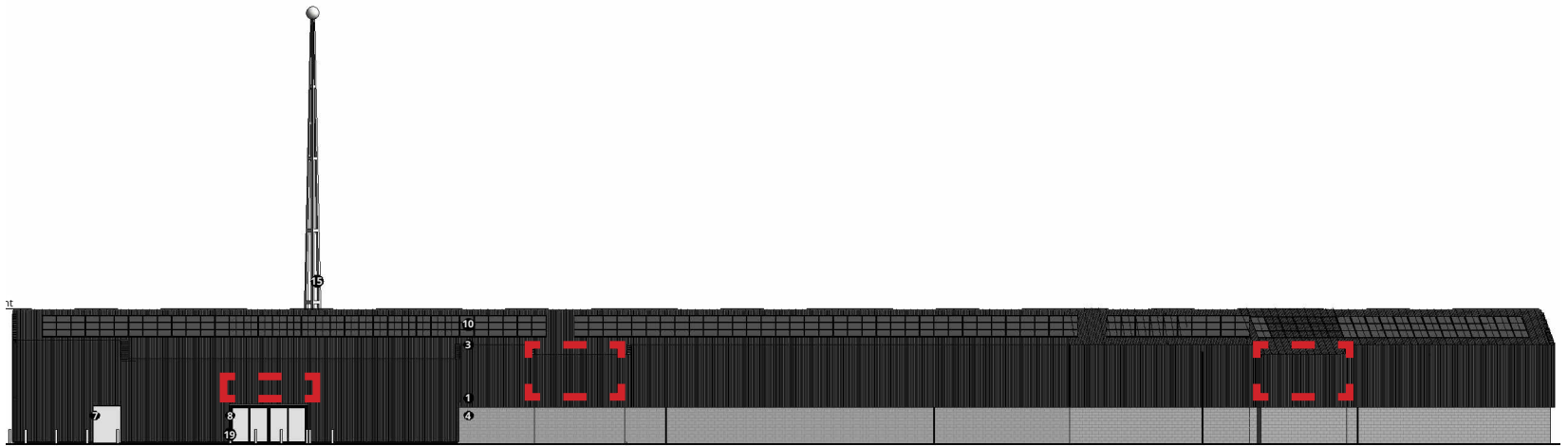
The external envelope of the driving range building provides a key area on arrival for carefully curated external brand identification as indicated on the elevation drawing opposite.

The remaining signage will need to be on the site boundary to direct people from the access road from Heywood old road as indicated in the visualisation.

Further details of the proposed signage features will be developed at later detailed design stages which will be subject to a separate statutory signage application process. Manchester golf centre will work closely with the council to ensure the signage will positively contribute to the local character and appearance.



Advertisement Zone



5.0 Visualisations



NEW ENTRANCE TO IMPROVE PEDESTRIAN & VEHICULAR ACCESS



PEDESTRIAN ENTRANCE VIEW



NEW ADVENTURE GOLF FACILITY WITH INCREASED CAR PARKING



OVERALL PROPOSED SITE CONFIGURATION WITH IMPROVED GOLF BALL RETRIEVAL HIGH NETTED FENCING



DRIVING RANGE FACING VIEW



REAR ELEVATION VIEW



FIRST FLOOR DRIVING RANGE OUTLOOK VIEW



GROUND FLOOR DRIVING RANGE OUTLOOK VIEW



Evening LIGHT VIEW