V7

Existing



Extent of 50mm single frame image (27° field of view in portrait)

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

Proposed (Year 15)



Extent of 50mm single frame image (27° field of view in portrait)

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Langstone Costal Defence
Viewpoint 7

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Assessment of the Visual Effects on the Visual Receptors from Viewpoint 7					
Photo details **Direction of View: North** **Distance to Site: 13 m**					
Location – See Figure 2, Viewpoints Location Plan	The view was taken from the shingle beach looking north up Langstone High Street.				
Landscape Character/Scale	This section includes Frontage 4 and 5. The PRoW (108/129/2) runs along the shoreline to the top of Langstone high street. This PRoW then joins another called the wadeway (108/132/1) which allows tidal access across the harbour to Hayling Island at low tide. On the harbour frontage there is a mixture of residential and commercial properties. There are several listed buildings (all Grade II) to the harbour frontage. The almost constant rumbling sound of traffic travelling over the expansion joints along Hayling Bridge is a detractor from the harbourside otherwise tranquil setting.				
Foreground	Langstone Highstreet with the residential buildings No 24 Winklemarket and No 25 Langstone High Street. PRoW snakes around the edge of the property frontages. This floods at high tide. There are numerous slight level changes and different materials used in the pathway construction.				
Midground	Properties off Langstone High Street with 3 Grade II listed properties on the right of the road. This is a residential area with mostly on road parking. Properties to the front end abut the pavement, while further back residential properties are set back from the road with a small expanse of lawn. A juxtaposition of different housing types, but with materials and finishes that complement each other.				
Background	Langstone High Street joins the A3023 (Langstone Road). This is the only access road to Hayling Island from the mainland.				
Receptor Type	**Receptor Sensitivity**	**Magnitude of Impact**		**Significance of Effect**	
		Construction	**Operation** *(Year 15 Summer/Winter)*	**Construction**	**Operation** *(Year 15 Summer)/Winter)*
Transient receptors – Recreational users of Chichester Harbour (Tidal Landscape)	Very High	Moderate	Minor	Moderate adverse	Slight adverse
Comments on the Assessment of Potential Visual Effects	**Construction** **Summer and Winter** Along Frontage 4 the footpath will be closed for the duration of the works. The new flood defence at the Lookout (pictured) consists of a cladded, reinforced concrete quay wall with sheet-pile toe reinforced concrete footpath and a reinforced concrete garden flood wall. Construction will require the use of a 8- and 35t excavator. The existing footpath is to be broken out, and replaced with new width varied to suit the existing property wall with a minimum clearance of 1500mm. The lower wall is to be clad in red class a engineering brick. The upper wall at the Lookout will be clad in a combination of old heritage engineering brick and stone cladding. One of the trees at the Lookout may be felled following an assessment by the project arboriculturist. Some vegetation to the front of Green Cottage is to be cleared. Existing gates are to being removed and replaced with flood gates. New handrails in a traditional black style will run along the length of Frontage 4. This section of Frontage 5 involves the construction of a new reinforced concrete slipway and timber clad flood gates. The timber cladding is a more suitable aesthetic for this picturesque and historic area. The recommended wood is Oak or Sweet Chestnut for its durability and as it is can be sourced in the UK. The new slipway is to be finished with a v-groove surface finish. The existing granite setts are to be carefully removed and bed into the new slipway. The Magnitude of Impact during construction will be moderate, as there would be a noticeable difference to the perceptual qualities with the duration of the effect being medium term. The Significance of Effects as from this distance would be moderate adverse as the sense of place is diminished for high value receptors and due to the closure of the PRoW during construction. However, this is not significant based on the duration of the viewers experience of the works. **Operation Year 15** **Summer and Winter** There are no significant bands of vegetation that would determine a different impact in either the summer or winter during operation. Frontage 4 will involve the introduction of a new wall around No 24 Winklemarket and No 25 Langstone High Street. The frontage to the harbour side walkway will be clad in flint in a style and tone to match existing., along No 25 High Street and the eastern side of the Winkelmarket and in old heritage blend brick along the northern side of the Winklemarket. The frontage to the harbour side walkway will be clad in red class A engineering brick with a traditional style black post and handrail to the pavement edge. The reinforced concrete flood wall will be topped in reconstituted cast stone coping. The existing garden wall along No 25 and the building wall along the Winklemarket will be retained behind the sea defenses. The footpath will have an exposed aggregate finish with buff and grey coloured aggregates. These materials sensitively tie into and complements the juxtaposition of existing building facades. A black post and rail fence to the footpath edge ties in with the surrounding street furniture style and colour palette. Along this section of Frontage 5, the flood gate will remain open unless in flood. This has been clad in a light timber than marries with the surrounding historic hard landscape palette. All the flood gate face panels will be clad in a timber and are a proprietary product designed by others. The Magnitude of Impact during operation Year 15 will be minor. There are minor alternations to the key elements and the introduction of some additional safety elements, that were uncharacteristic of the original scheme. The ease of interaction between the recreational users and the sea edge has been lost in some areas due to the introduction of railing. The access to the water's edge is more controlled than previously. The symbiotic relationship between the coast and its people are an important factor in the enjoyment of this coastal zone. Recreation activities with the seascape are part of the tradition of village life. The Significance of Effect would be slight adverse. While the flood defence hard landscape materials have been sensitively incorporated into the overall scheme and would age, distress, weather and soften into the more historic hard landscape elements, the newness of the materials would be slightly noticeable upon closer inspection.				
Mitigation Strategy: *screening, on and off site planting, ground modeling, design modifications, alternative materials, colors*	**Overall mitigation measures to that section of frontage.** Frontage 4 1. Proposed guardrails with chain access for kayaks and boats. 2. Resurface existing pathway to match proposed pathway. 3. Historic Langstone Wadeway - opportunity for interpretation panel on land near here to explain history.			Frontage 5 1. Integrate seating and pathway resurfacing. 2. New earth embankment and reinstatement areas grass seeded to agricultural use. 3. New tree planting and native hedgerow.	
Mitigation Cross Reference	Frontage 4 • LANDSCAPE LAYOUT - LANG-ACM-LS-F4-DR-LA-011023 • SITE CLEARANCE PLAN - LANG-ACM-SC-F4-DR-ZZ-011033 • GENERAL ARRANGEMENT- LANG-ACM-ZZ-F4-DR-ZZ-011401 • FRONTAGE 4 TYPICAL DETAILS SHEET 1 WATCHTOWER - LANG-ACM-ZZ-F4-DR-ZZ-051403 • FRONTAGE 4 TYPICAL DETAILS SHEET 2 WATCHTOWER STEPS - LANG-ACM-ZZ-F4-DR-ZZ-051404 • FRONTAGE 4 TYPICAL DETAILS SHEET 3 GREEN COTTAGE ANNEX - LANG-ACM-ZZ-F4-DR-ZZ-051405 • TYPICAL DETAILS SHEET 4 GREEN COTTAGE - LANG-ACM-ZZ-F4-DR-ZZ-051406 • TYPICAL DETAILS SHEET 5 GREEN COTTAGE GATE - LANG-ACM-ZZ-F4-DR-ZZ-051407 • TYPICAL DETAILS SHEET 6 THE FLINT WALL - LANG-ACM-ZZ-F4-DR-ZZ-051408 • TYPICAL DETAILS SHEET 7 WINKLEMARKET - LANG-ACM-ZZ-F4-DR-ZZ-051409 • TYPICAL DETAILS SHEET 8 WINKLEMARKET AND FLINT WALL TIE IN DETAILS - LANG-ACM-ZZ-F4-DR-ZZ-051410			Frontage 5 • LANDSCAPE LAYOUT - LANG-ACM-LS-F5-DR-LA-011024 • SITE CLEARANCE PLAN - LANG-ACM-SC-F5-DR-ZZ-011034 • GENERAL ARRANGEMENT- LANG-ACM-ZZ-F5-DR-ZZ-011501 • TYPICAL DETAILS SHEET 1 HIGH STREET AND ROYAL OAK - LANG-ACM-ZZ-F5-DR-ZZ-051504 • TYPICAL DETAILS SHEET 2 ROYAL OAK NORTH AND ALLOTMENT - LANG-ACM-ZZ-F5-DR-ZZ-051505 • TYPICAL DETAILS SHEET 3 EMBANKMENT - LANG-ACM-ZZ-F5-DR-ZZ-051506	

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V8

Existing



Extent of 50mm single frame image (27° field of view in portrait)

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

Proposed (Year 15)



Extent of 50mm single frame image (27° field of view in portrait)

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Langstone Costal Defence
Viewpoint 8

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Assessment of the Visual Effects on the Visual Receptors from Viewpoint 8

Photo details

Direction of View: North
Distance to Site: within the site

Location – See Figure 2, Viewpoints Location Plan	The view was taken from the Ship Inn car park on the harbour edge along PRoW 108/129/2.
Landscape Character/Scale	Eastern edge of Langstone village. Langstone Road crosses Hayling Bridge and this is the only vehicular access to the island. The almost constant rumbling sound of traffic traveling over the expansion joints along Hayling Bridge is a detractor from the harbourside tranquility.
Foreground	Chichester Harbour which is an outstandingly beautiful area and designated for the protection of its scenic quality. This is a tidal landscape. The tidal range is typically between 4 and 5m on the spring tides. This leaves an extensive intertidal area between the harbours.
Midground	To the midground lies the Ship Inn and the village of Langstone. The historic development core lies to the harbour frontage with the newer developments and the industries being developed to the rear. Langstone was a coastal port that served the agricultural hinterland. The port has now reestablished itself as a recreational area, supporting sea-based industries.
Background	Royal Oak Pub on the harbour frontage can be seen in the background. PRoW snakes around the harbourside edge and continues along foreshore.

Receptor Type	**Receptor Sensitivity**	**Magnitude of Impact**		**Significance of Effect**	
		Construction	**Operation** *(Year 15 Summer/Winter)*	**Construction**	**Operation** *(Year 15 Summer)/Winter)*
Transient receptors - PRoW 108/129/2	High	Moderate	Minor	Moderate adverse	Slight adverse

Comments on the Assessment of Potential Visual Effects

Construction
Summer and Winter
Frontage 3
At the Ship Inn, construction works will require the demolition of the existing breeze block wall. In its place a new sheet pile wall with a reinforced concrete capping and flood wall will be constructed. The wall (15m in length) will be clad on the seawards side in red class a engineering brick and topped with flood glass. During construction a temporary flood defence will be put in place using ton bags and the car park will include construction signage, compound area for welfare, materials, and plant. Screening will be placed adjacent to the Ship Inn. The foreshore and pub seating area will be backfilled. In the car park and new earth bund is to be constructed. Construction works will require excavation of the existing car park surfacing and placement and compaction of fill material. A new reinforced concrete retaining wall with access steps is to be constructed to support the raised earth. This wall is not to be cladded. Handrailing in a traditional black style will be included along the edge of the retaining wall. Along the A3023 the flood defence comprises of trench sheeting with reinforced concrete capping beam. This wall is not to be clad. Construction equipment used will include 8-, 13- and 35-ton excavators.
Frontage 4:
Frontage 4 will require the closure of the PRoW (108/129/2) to install sheet piles and cladding. The new flood defence at the Looout (pictured) consists of a cladded, reinforced concrete quay wall with sheet-pile toe reinforced concrete footpath and a reinforced concrete garden flood wall. Construction will require the use of a 8- and 35t excavator. The existing footpath is to be broken out, and replaced with new width varied to suit the existing property wall with a minimum clearance of 1500mm. The lower wall is to be clad in red class a engineering brick. The upper wall at the lookout will be clad in a combination of old heritage engineering brick and stone cladding. One of the trees at the Lookout may be felled following an assessment by the project arboriculturist. Some vegetation to the front of Green Cottage is to be cleared. Existing gates are to being removed and replaced with flood gates. A new wall will be created along the harbour edge as well as a new footpath and handrailing. Construction equipment used will include 8- and 35-ton excavators.
Frontage 5:
In the mid distance, the Frontage 5 Royal Oak section will involve the construction of a new reinforced concrete wall with a sheet pile toe. The wall will be clad in stone, topped with flood glass outside the High Street cottages and the Royal Oak pub and transition into a solid wall beyond this. Safety fencing will be placed outside the Royal Oak and Heras fencing to 21 Langstone High Street Garden.
The Magnitude of Impact during construction will be moderate, as there would be a noticeable difference to the perceptual qualities with the duration of the effect being medium term. The Significance of Effects as from this distance would be moderate adverse as the sense of place is diminished for high value receptors and due to the closure of the PRoW during construction. This is not significant based on the period of time the viewer would experience the works and the baseline view of the car park.

Operation Year 15
Summer and Winter
Frontage 3 will include a new concrete wall (15m in length). This wall will have flood glass paneling to wall top. This wall will be clad in red brick with a sandy coping stone to complement the building surrounds and the red tiles of the Ship Inn.
Along the harbour edge a new interpretation board and planters will be installed. The current seating, bins and bollards will be retained. Along the A3023 the defence comprises trench sheeting with a reinforced concrete capping beam. This will be fronted by coastal wildflower seeding.
The new earth bund is to have an asphalt finish. In front of the Ship Inn annex, the new reinforced concrete wall will be clad in an old heritage blend brick cladding. This will be topped with reconstituted cast stone coping. The walkway frontage will be clad in red class A engineering brick with a traditional style black post and handrail to the pavement edge. Materials will marry with the existing frontage and the change will be imperceptible in the wider view.
Frontage 4 operation will not be visible from this viewpoint and only glimpse distant views of Frontage 5.
The Magnitude of Impact during operation Year 15 will be minor. There are minor alternations to the key elements, that were uncharacteristic of the original scheme.

Mitigation Strategy: *screening, on and off site planting, ground modeling, design modifications, alternative materials, colors*

Overall mitigation measures to that section of frontage.

Frontage 3

1. Proposed retaining wall and hand railings along the steps and ramp.
2. New retaining wall to be brick cladded.
3. New ramp, steps and handrails to be consistent with the overall landscape strategy.
4. Potential for interpretation boards, seating, wayfinding.
5. New planters to the car park.

Frontage 4

1. Proposed guardrails with chain access for kayaks and boats.
2. Resurface existing pathway to match proposed pathway.
3. Historic Langstone Wadeway - opportunity for interpretation panel on land near here to explain history

Frontage 5

1. Integrate seating and pathway resurfacing.
2. New earth embankment and reinstatement areas grass seeded to agricultural use.
3. New tree planting and native hedgerow.

Mitigation Cross Reference

Frontage 3

- LANDSCAPE LAYOUT - LANG-ACM-LS-F3-DR-LA-011022
- SITE CLEARANCE PLAN - LANG-ACM-SC-F3-DR-ZZ-011032
- GENERAL ARRANGEMENT- LANG-ACM-ZZ-F3-DR-ZZ-011301
- TYPICAL DETAILS SHEET 1 SHIP INN CAR PARK- LANG-ACM-ZZ-F3-DR-ZZ-051304
- TYPICAL DETAILS SHEET 2 A3023 AND SHIP INN CAR PARK- LANG-ACM-ZZ-F3-DR-ZZ-051305
- TYPICAL DETAILS SHEET 3 SHEET PILE WALL AND SHIP INN ANNEX- LANG-ACM-ZZ-F3-DR-ZZ-051306

Frontage 4

- LANDSCAPE LAYOUT - LANG-ACM-LS-F4-DR-LA-011023
- SITE CLEARANCE PLAN - LANG-ACM-SC-F4-DR-ZZ-011033
- GENERAL ARRANGEMENT- LANG-ACM-ZZ-F4-DR-ZZ-011401
- FRONTAGE 4 TYPICAL DETAILS SHEET 1 WATCHTOWER - LANG-ACM-ZZ-F4-DR-ZZ-051403
- FRONTAGE 4 TYPICAL DETAILS SHEET 2 WATCHTOWER STEPS - LANG-ACM-ZZ-F4-DR-ZZ-051404
- FRONTAGE 4 TYPICAL DETAILS SHEET 3 GREEN COTTAGE ANNEX - LANG-ACM-ZZ-F4-DR-ZZ-051405
- TYPICAL DETAILS SHEET 4 GREEN COTTAGE - LANG-ACM-ZZ-F4-DR-ZZ-051406
- TYPICAL DETAILS SHEET 5 GREEN COTTAGE GATE - LANG-ACM-ZZ-F4-DR-ZZ-051407
- TYPICAL DETAILS SHEET 6 THE FLINT WALL - LANG-ACM-ZZ-F4-DR-ZZ-051408
- TYPICAL DETAILS SHEET 7 WINKLEMARKET - LANG-ACM-ZZ-F4-DR-ZZ-051409
- TYPICAL DETAILS SHEET 8 WINKLEMARKET AND FLINT WALL TIE IN DETAILS - LANG-ACM-ZZ-F4-DR-ZZ-051410

Frontage 5

- LANDSCAPE LAYOUT - LANG-ACM-LS-F5-DR-LA-011024
- SITE CLEARANCE PLAN - LANG-ACM-SC-F5-DR-ZZ-011034
- GENERAL ARRANGEMENT- LANG-ACM-ZZ-F5-DR-ZZ-011501
- TYPICAL DETAILS SHEET 1 HIGH STREET AND ROYAL OAK - LANG-ACM-ZZ-F5-DR-ZZ-051504
- TYPICAL DETAILS SHEET 2 ROYAL OAK NORTH AND ALLOTMENT - LANG-ACM-ZZ-F5-DR-ZZ-051505
- TYPICAL DETAILS SHEET 3 EMBANKMENT - LANG-ACM-ZZ-F5-DR-ZZ-051506

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V9

Existing



Extent of 50mm single frame image (27° field of view in portrait)

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

Proposed (Year 15)



Extent of 50mm single frame image (27° field of view in portrait)

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

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Langstone Costal Defence
Viewpoint 9

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Assessment of the Visual Effects on the Visual Receptors from Viewpoint 9						
Photo details **Direction of View: North east** **Distance to Site: within the site**						
Location – See Figure 2, Viewpoints Location Plan	The view was taken from a shingle beach just below the harbourside pathway (PRoW 108/129/2) in Chichester Harbour.					
Landscape Character/Scale	Residential housing along the harbourside with some small garden areas to the housing frontage.					
Foreground	Green Cottage and Green Cottage Annex along the harbourside with some small garden areas to the housing frontage.					
Midground	Royal Oak public house and some residential buildings off Langstone High Street. Some screen vegetation from resident's gardens/Langstone Meadows peeps over the roof tops. Continuation of the harbourside walk. PRoW 108/129/2 joins a network of designated pathways to the east of the village.					
Background	Views are limited by the vegetative horizon and relatively flat topography.					
Receptor Type	**Receptor Sensitivity**	**Magnitude of Impact**		**Significance of Effect**		
		Construction	**Operation** *(Year 15 Summer/Winter)*	**Construction**	**Operation** *(Year 15 Summer)/Winter)*	
Transient receptors – Recreational users of Chichester Harbour (Tidal Landscape)	Very High	Moderate	Minor	Moderate adverse	Slight adverse	
Comments on the Assessment of Potential Visual Effects	**Construction** **Summer and Winter** There are no intermittent bands of vegetation that would determine a different impact in either the summer or winter during construction. Frontage 4 and in the background Frontage 5 will be seen from this viewpoint. The PRoW (108/129/2) will be closed during construction. The existing footpath is to be broken out, width varied to suit existing property wall minimum clearance 1500mm. Existing gates are being removed and replaced with flood gates. Some of the vegetation to the front of Green Cottage is to be cleared. To the background the western section of Frontage 5 will be constructed. Long distance views from here will involve the addition of a new reinforced concrete flood wall with a sheet pile toe. The new wall will be clad in stone and topped with flood glass. The Magnitude of Impact during construction will be moderate, as there would be a noticeable difference to the perceptual qualities with the duration of the effect being medium term. The Significance of Effects would be moderate adverse as the sense of place is diminished for high value receptors. However, this is not significant based on the duration of the viewers experience of the works. **Operation Year 15** **Summer and Winter** There are no intermittent bands of vegetation that would determine a different impact in either the summer or winter during operation. Between the Ship Inn Annex and the Coastguard Cottages Frontage 4 - the wall will be clad in red class A engineering brick with a traditional style black post and handrail to the pavement edge. The reinforced concrete flood wall will be topped in reconstituted cast stone coping. The existing garden wall will be retained behind the sea defenses. The footpath will have an exposed aggregate finish with buff and grey-coloured aggregates. Green Cottage Annex Frontage 4- The flood wall will be clad in flint in a style and tone like existing. The frontage to the harbour side walkway will be clad in red class A engineering brick with a traditional style black post and handrail to the pavement edge. The reinforced concrete flood wall will be topped in reconstituted cast stone coping. The existing garden wall will be retained behind the sea defences. The footpath will have an exposed aggregate finish with buff and grey-coloured aggregates. The flood gates will be timber clad as this is a more suitable aesthetic for this picturesque and historic area. The recommended wood is Oak or Sweet Chestnut for its durability and as it is can be sourced in the UK. In the distance to Frontage 5 - a new reinforced concrete wall with a flood glass barrier to the top. The footpath will be reinstated with paving slabs and supplemented with additional limestone paving slabs. The wall is to be clad in stone. There will be 3 types of facing stone used and they will include blue sandstone, cream limestone, and green Gloucester stone. The stone finish is tumbled, and the final random arrangement will be confirmed on site. The Magnitude of Impact during operation Year 15 will be minor. There are minor alternations to the key elements and the introduction of some additional safety elements, which were uncharacteristic of the original scheme. The ease of interaction between the recreational users and the sea edge has been lost in some areas due to the introduction of handrailing. The access to the water's edge is more controlled than previously. The symbiotic relationship between the coast and its people are a key factor in the enjoyment of this coastal zone. Recreation activities with the seascape are part of the tradition of village life. The Significance of Effect would be slight adverse. While the flood defence hard landscape materials have been sensitively incorporated into the overall scheme and would age, distress, weather and soften into the more historic hard landscape elements, the newness of the materials would be slightly noticeable upon closer inspection.					
Mitigation Strategy: *screening, on and off site planting, ground modeling, design modifications, alternative materials, colors*	**Overall mitigation measures to that section of frontage.** Frontage 4 1. Proposed guardrails with chain access for kayaks and boats. 2. Resurface existing pathway to match proposed pathway. 3. Historic Langstone Wadeway - opportunity for interpretation panel on land near here to explain history			Frontage 5 1. Integrate seating and pathway resurfacing. 2. New earth embankment and reinstatement areas grass seeded to agricultural use. 3. New tree planting and native hedgerow.		
Mitigation Cross Reference	Frontage 4 • LANDSCAPE LAYOUT - LANG-ACM-LS-F4-DR-LA-011023 • SITE CLEARANCE PLAN - LANG-ACM-SC-F4-DR-ZZ-011033 • GENERAL ARRANGEMENT- LANG-ACM-ZZ-F4-DR-ZZ-011401 • FRONTAGE 4 TYPICAL DETAILS SHEET 1 WATCHTOWER - LANG-ACM-ZZ-F4-DR-ZZ-051403 • FRONTAGE 4 TYPICAL DETAILS SHEET 2 WATCHTOWER STEPS - LANG-ACM-ZZ-F4-DR-ZZ-051404 • FRONTAGE 4 TYPICAL DETAILS SHEET 3 GREEN COTTAGE ANNEX - LANG-ACM-ZZ-F4-DR-ZZ-051405 • TYPICAL DETAILS SHEET 4 GREEN COTTAGE - LANG-ACM-ZZ-F4-DR-ZZ-051406 • TYPICAL DETAILS SHEET 5 GREEN COTTAGE GATE - LANG-ACM-ZZ-F4-DR-ZZ-051407 • TYPICAL DETAILS SHEET 6 THE FLINT WALL - LANG-ACM-ZZ-F4-DR-ZZ-051408 • TYPICAL DETAILS SHEET 7 WINKLEMARKET - LANG-ACM-ZZ-F4-DR-ZZ-051409 • TYPICAL DETAILS SHEET 8 WINKLEMARKET AND FLINT WALL TIE IN DETAILS - LANG-ACM-ZZ-F4-DR-ZZ-051410 Frontage 5 • LANDSCAPE LAYOUT - LANG-ACM-LS-F5-DR-LA-011024 • SITE CLEARANCE PLAN - LANG-ACM-SC-F5-DR-ZZ-011034 • GENERAL ARRANGEMENT- LANG-ACM-ZZ-F5-DR-ZZ-011501 • TYPICAL DETAILS SHEET 1 HIGH STREET AND ROYAL OAK - LANG-ACM-ZZ-F5-DR-ZZ-051504 • TYPICAL DETAILS SHEET 2 ROYAL OAK NORTH AND ALLOTMENT - LANG-ACM-ZZ-F5-DR-ZZ-051505 • TYPICAL DETAILS SHEET 3 EMBANKMENT - LANG-ACM-ZZ-F5-DR-ZZ-051506 •					

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V10

Existing



Extent of 50mm single frame image (27° field of view in portrait)

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

Proposed (Year 15)



Extent of 50mm single frame image (27° field of view in portrait)

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

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Langstone Costal Defence
Viewpoint 10

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Assessment of the Visual Effects on the Visual Receptors from Viewpoint 10

Photo details

Direction of View : East
Distance to Site: 75m

Location – See Figure 2, Viewpoints Location Plan	The view was taken from the middle of Langstone High Street.
Landscape Character/Scale	Residential properties along most of the road. St Nicholas Chapel located on Towers Garden Road. Road leads directly to the harbour frontage. No 8-14 Langstone High Street is a Grade II listed properties. Within the historic core of Langstone village, the local road network radiates towards the harbour side. This provides some stunning unhindered vistas of the coastline. The constant hum of traffic from Langstone Road to Hayling Island is noticeable in the background.
Foreground	Residential properties along most of the road. St Nicholas Chapel located on Towers Garden Road. Road leads directly to the harbour frontage. No 8-14 Langstone High Street are Grade II listed properties. This street is located within the historic core of Langstone village. The local road network radiates towards the harbour side which provides some stunning unhindered vistas of the coastline. The constant hum of traffic from Langstone Road to Hayling Island is noticeable in the background.
Midground	Langstone High Street allows car users to drive onto the harbourside. There is a timber gate and bollards to the harbour edge. PRoW (108/129/2) follows the coastal footpath at the end of the road and joins at network of PRoW to the east of the village. When the tide is out PRoW (108/132/1) allows access across the harbour to Hayling Island. The village of Langstone and Hayling Island historically were interconnected by a sea bank which was passable at low tide before the bridge was constructed.
Background	In the background there are long views across the harbour basin. There are extensive areas of intertidal mudflat habitat. The upper shore is dominated by littoral coarse settlement and coastal shingle. Due to the substantial intertidal flow the boat moorings are concentrated within the main drainage channels which retain water at low tide. Hayling Island can be seen to the background to the west. To the east is the mainland extending to the town of Emsworth.

Receptor Type	Receptor Sensitivity	Magnitude of Impact		Significance of Effect	
		Construction	Operation *(Year 15 Summer/Winter)*	Construction	Operation *(Year 15 Summer)/Winter)*
Residential receptors- - Langstone High Street	Very High	Moderate	Negligible	Negligible adverse	Neutral

Comments on the Assessment of Potential Visual Effects

Construction
Summer and winter
The PRoW (108/129/2) will be closed during construction. This section of Frontage 5 involves the construction of a new reinforced concrete slipway and timber clad flood gates The foreshore will be excavated to install new sheet piles along frontage 4 and 5. A new footpath will be constructed, with flood walls and handrailing. Existing gates are being removed and replaced with flood gates. The Magnitude of Impact during construction will be moderate, as construction equipment would be visible and access to the sea would be cut off for a time from this location. The Significance of Effects would be moderate adverse as the sense of place is diminished for high value receptors and due to the closure of the PRoW during construction.

Summer and Winter
Operation Year 15
At operation and from this distance there will be no discernible change in view.
To the south of the flood gate, black railings will be added due to level changes. To the north of the gate a low-lying wall with flood glass will be constructed along the public house frontage. These sections will connect with the proposed gate but are not visible from this viewpoint.
The flood gates will be timber clad as this is a more suitable aesthetic in sympathy with the local material palette. The recommended wood is Oak or Sweet Chestnut for its durability and as it is can be sourced in the UK. The open view and attractive vista will be maintained, as the gate will only be closed when in flood.
The Magnitude of Impact during operation Year 15 will be negligible. There are minor alternations to the key elements, with the introduction of a flood gate.
The Significance of Effect would be negligible adverse. From this viewpoint location the proposed mitigation measures would result in a barely perceptible change in view, except when the gate is closed in flood conditions.

Mitigation Strategy: *screening, on and off site planting, ground modeling, design modifications, alternative materials, colors*

Overall mitigation measures to that section of frontage.

Frontage 4

1. Proposed guardrails with chain access for kayaks and boats.
2. Resurface existing pathway to match proposed pathway.
3. Historic Langstone Wadeway - opportunity for interpretation panel on land near here to explain history

Frontage 5

1. Integrate seating and pathway resurfacing.
2. New earth embankment and reinstatement areas grass seeded to agricultural use.
3. New tree planting and native hedgerow.

Mitigation Cross Reference

Frontage 4

- LANDSCAPE LAYOUT - LANG-ACM-LS-F4-DR-LA-011023
- SITE CLEARANCE PLAN - LANG-ACM-SC-F4-DR-ZZ-011033
- GENERAL ARRANGEMENT- LANG-ACM-ZZ-F4-DR-ZZ-011401
- FRONTAGE 4 TYPICAL DETAILS SHEET 1 WATCHTOWER - LANG-ACM-ZZ-F4-DR-ZZ-051403
- FRONTAGE 4 TYPICAL DETAILS SHEET 2 WATCHTOWER STEPS - LANG-ACM-ZZ-F4-DR-ZZ-051404
- FRONTAGE 4 TYPICAL DETAILS SHEET 3 GREEN COTTAGE ANNEX - LANG-ACM-ZZ-F4-DR-ZZ-051405
- TYPICAL DETAILS SHEET 4 GREEN COTTAGE - LANG-ACM-ZZ-F4-DR-ZZ-051406
- TYPICAL DETAILS SHEET 5 GREEN COTTAGE GATE - LANG-ACM-ZZ-F4-DR-ZZ-051407
- TYPICAL DETAILS SHEET 6 THE FLINT WALL - LANG-ACM-ZZ-F4-DR-ZZ-051408
- TYPICAL DETAILS SHEET 7 WINKLEMARKET - LANG-ACM-ZZ-F4-DR-ZZ-051409
- TYPICAL DETAILS SHEET 8 WINKLEMARKET AND FLINT WALL TIE IN DETAILS - LANG-ACM-ZZ-F4-DR-ZZ-051410

Frontage 5

- LANDSCAPE LAYOUT - LANG-ACM-LS-F5-DR-LA-011024
- SITE CLEARANCE PLAN - LANG-ACM-SC-F5-DR-ZZ-011034
- GENERAL ARRANGEMENT- LANG-ACM-ZZ-F5-DR-ZZ-011501
- TYPICAL DETAILS SHEET 1 HIGH STREET AND ROYAL OAK - LANG-ACM-ZZ-F5-DR-ZZ-051504
- TYPICAL DETAILS SHEET 2 ROYAL OAK NORTH AND ALLOTMENT - LANG-ACM-ZZ-F5-DR-ZZ-051505
- TYPICAL DETAILS SHEET 3 EMBANKMENT - LANG-ACM-ZZ-F5-DR-ZZ-051506
-

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V11

Existing



Extent of 50mm single frame image (27° field of view in portrait)

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

Proposed (Year 15)



Extent of 50mm single frame image (27° field of view in portrait)

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

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Langstone Costal Defence
Viewpoint 11

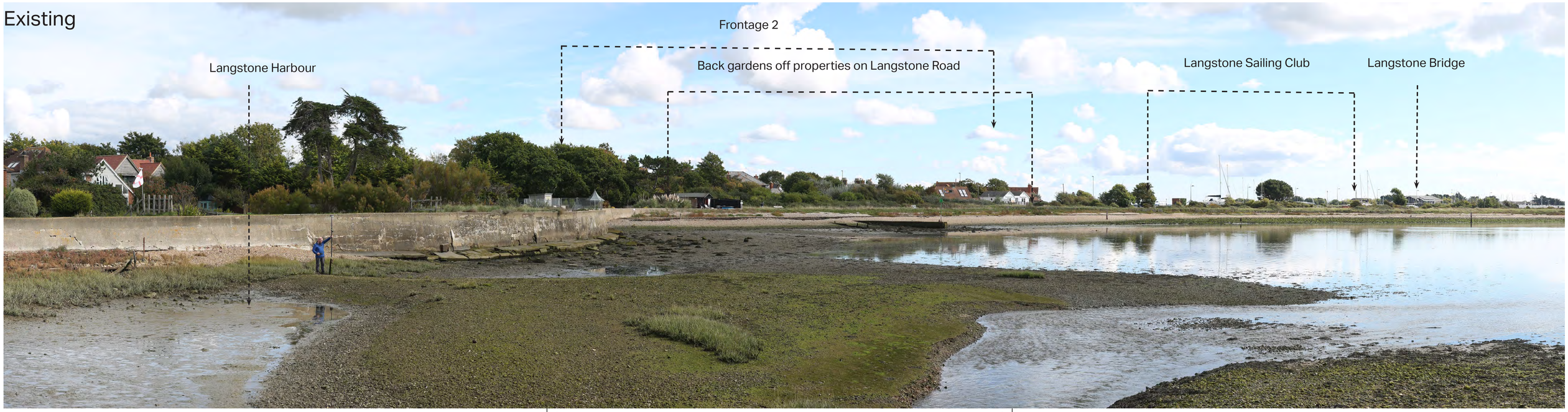
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Assessment of the Visual Effects on the Visual Receptors from Viewpoint 11						
Photo details **Direction of View: South east** **Distance to Site: within the site**						
Location – See Figure 2, Viewpoints Location Plan	The view was taken from Wayfarer's Wayon the seafront. Located to the back of residential properties on Langstone Village.					
Landscape Character/Scale	This section of the footpath is located between the A3023 (Langstone Road) and properties on Mill Lane / Harbourside. Either side of footpath are tall hedges of native seaside scrub that open in places to give wide sweeping views to the bridge and Langstone Harbour. The hum of traffic traveling over Langstone Bridge to Hayling Island can be heard in the distance.					
Foreground	Coastal footpath with dense scrub vegetation between the foreshore and the back gardens of residential properties off Langstone Road, Mill Lane and Harbourside. Predominate species include bramble and sea buckthorn which form a dense impenetrable barrier and offer some shelter. Well used recreational route that joins PRoW (108/129/2) to the east.					
Midground	From this viewpoint we can see the roof line of a residential property off Langstone Road and the yachts in the boat park at Langstone sailing club. Also visible is the passing traffic on Langstone Bridge. Some blocks of mature deciduous and evergreen trees screen sections of the distant views.					
Background	In the background there are belts of mature vegetation to the edge of the Northney Marina on Hayling Island.					
Receptor Type	**Receptor Sensitivity**	**Magnitude of Impact**		**Significance of Effect**		
		Construction	**Operation** *(Year 15 Summer/Winter)*	**Construction**	**Operation** *(Year 15 Summer)/Winter)*	
Transient receptors - Wayfarer's Way	Very High	Moderate	Minor	Moderate adverse	Slight adverse	
Comments on the Assessment of Potential Visual Effects	**Construction** **Summer and Winter** The works along this section of the Frontage 2 include the closure of Wayfarer's Way The footpath will be slightly realigned. Removal of vegetation is required for the realignment of the pathway and the construction of the sheet pile structures. A trench will be excavated to install the sheet piles. The Magnitude of Impact during the construction phase will be moderate as the size and scale of the construction works will give a noticeable change to a large proportion of the existing view, with the removal of bands of vegetation to enable construction. The Significance of Effect during construction would be moderate adverse, as there would be an adverse impact on some of the characteristic elements of this place and the sense of place. In addition, the receptor is of very high value and the construction works would introduce a discordant element into the view as well as the closure of the Wayfarer's Way for the duration of the works. **Operation Year 15** **Winter and Summer** Wayfarer's Way will be reopened and will now be a wider shared cycleway and footpath. Proposed cycle path typical width 3m. The cycle path will be surfaced with asphalt with concrete edging. The sheet pile wall will be clad in sustainable wood planks. The area will be reinstated with rich wildflower seed mixes for hedgerow and coastal meadow. Native tree and shrub planting will have established and will provide the screening and shelter. The landscape will be enhanced with the introduction of seating areas and now established native tree and shrub planting. Further ecological enhancement will take place such as the introduction of bee posts along the route. View may open in the winter as most of the planting proposed is deciduous. The Magnitude of Impact during operation Year 15 is minor. The proposed planting will have matured at this stage and the landscape components, aesthetic, perceptual qualities and character of this landscape will be restored. The Significance of Effect would be slight adverse.The mitigation measures would now blend into the landscape, and help restore the sense of place.					
Mitigation Strategy: *screening, on and off site planting, ground modeling, design modifications, alternative materials, colors*	**Overall mitigation measures to that section of frontage.** Frontage 2 1. Proposed widening of shared cycleway/pathway from 1.9m to 3m to comply with highway standards. 2. Ecological measures such as Bee Posts to be included along the route. 3. Potential to enhance landscape, green space, footpaths, and benches. 4. Opportunity for wayfinding, interpretation boards and benches. 5. Reinstatement areas along improved shared cycleway/pathway to include species rich wildflower seeding, hedgerow and coastal meadow.					
Mitigation Cross Reference	Frontage 2 • LANDSCAPE LAYOUT - LANG-ACM-LS-F2-DR-LA-011021 • SITE CLEARANCE PLAN - LANG-ACM-SC-F2-DR-ZZ-011031 • GENERAL ARRANGEMENT- LANG-ACM-ZZ-F2-DR-ZZ-011201 • TYPICAL DETAILS SHEET PILE WALL ALTERNATIVE - LANG-ACM-ZZ-F2-DR-ZZ-051204 • TYPICAL DETAILS SHEET PILE WALL ALTERNATIVE- LANG-ACM-ZZ-F2-DR-ZZ-051205 • TYPICAL DETAILS SHEET PILE WALL ALTERNATIVE- LANG-ACM-ZZ-F2-DR-ZZ-051206					

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V12

Existing



Extent of 50mm single frame image (27° field of view in portrait)

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

Proposed (Year 15)



Extent of 50mm single frame image (27° field of view in portrait)

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

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Langstone Costal Defence
Viewpoint 12

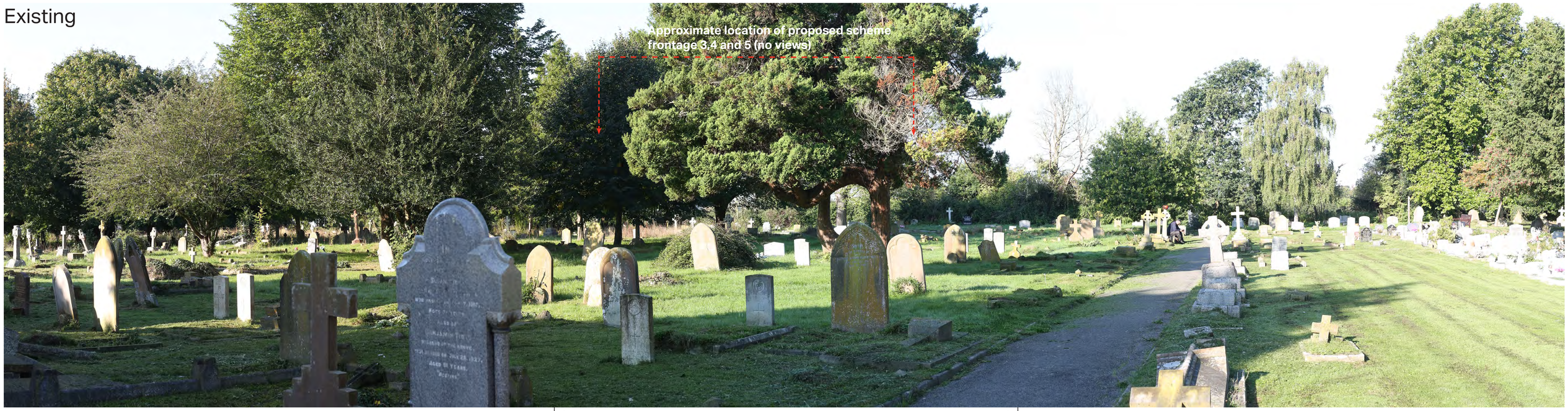
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Assessment of the Visual Effects on the Visual Receptors from Viewpoint 12					
Photo details **Direction of View: North east** **Distance to Site: 128m**					
Location – See Figure 2, Viewpoints Location Plan	The view was taken from Langstone Harbour foreshore, adjacent to the gardens of the properties on Harbourside.				
Landscape Character/Scale	Looking east towards Frontage 2, with Langstone Sailing Club and Langstone Bridge in the mid distance. The seafront has been modified as a result of sea protection measures. Langstone was a coastal port that served the agricultural hinterland. The port has now reestablished itself as a recreational area, supporting sea-based industries. Due to the substantial intertidal flow the boat moorings are concentrated within the main drainage channels which retain water at low tide. There are extensive areas of intertidal mudflat habitat, The upper shore is dominated by littoral course settlement and coastal shingle. The hum of traffic from traffic on Langstone Road is a detracting feature within the wider landscape.				
Foreground	Langstone Harbour located to the west of the village. Streams drain down into the harbour plain. The tidal range is between 4 and 5m, leaving an extensive intertidal area between harbours. Back gardens (Harbourside, Langstone Road and Mill Lane) border the PRoW along the seafront.				
Midground	Langstone Harbour is situated at the north east of Langstone Harbour. Langstone Bridge connects Langstone village to Hayling Island.				
Background	From this viewpoint we can see the residential property off Langstone Road and yachts in the boat park at Langstone sailing club. Also visible is the passing traffic on Langstone Bridge. Some blocks of mature deciduous and evergreen trees screen distant views beyond to Hayling Island.				
Receptor Type	**Receptor Sensitivity**	**Magnitude of Impact**		**Significance of Effect**	
		Construction	**Operation** *(Year 15 Summer/Winter)*	**Construction**	**Operation** *(Year 15 Summer)/Winter)*
Transient receptors – PRoW users (108/45/1)	Very High	Moderate	Minor	Minor adverse	Neutral
Comments on the Assessment of Potential Visual Effects	**Construction** **Summer and Winter** The works along this section of the Frontage 2 include the closure of Hayling Billy Line footpath/cycleway and Shipwrights Way. The footpath will be realigned. This will require the removal of the vegetation either side of the pathway. A trench will be excavated to install the sheet piles. The Magnitude of Impact during the construction phase will be moderate as the size and scale will give a noticeable change to a large proportion of the existing view, with the removal of bands of vegetation to enable construction of the sheet piling. The Significance of Effect during construction would be minor adverse, as there would be an adverse impact on some of the characteristic elements of this place and the sense of place. In addition, the receptor is of very high value and the construction works would introduce a discordant element into the view as well as the closure of the PRoW for the duration of the works. **Operation** **Summer and Winter** PRoW will be reopened and will now be a widened shared cycleway and footpath. Ground will be reinstated with rich wildflower seed mixes, hedgerow, and coastal meadow. Native tree and shrub planting will have established and will provide screening and shelter. The landscape will be enhanced with the introduction of seating areas and now established native tree and shrub planting. Further ecological enhancement will take place such as the introduction of bee posts and bat boxes along the route. The Magnitude of Impact during operation Year 15 is minor. The proposed planting to the will have matured at this stage and the landscape components, aesthetic, perceptual qualities, and character of this landscape will be restored. The Significance of Effect would be neutral. The mitigation measures would now blend into the landscape, restore the sense of place, and would represent an indiscernible change to the baseline situation. However, the added elements such as the clad sheet pile wall will remain but would be barely perceptible from this distance.				
Mitigation Strategy: *screening, on and off site planting, ground modeling, design modifications, alternative materials, colors*	**Overall mitigation measures to that section of frontage.** Frontage 2 1. Proposed widening of shared cycleway/pathway from 1.9 m to 3m to comply with highway standards. 2. Ecological measures such as Bee Posts to be included along the route. 3. Potential to enhance landscape, green space, footpaths, and benches. 4. Opportunity for wayfinding, interpretation boards and benches. 5. Reinstatement areas along improved shared cycleway/pathway to include species rich wildflower seeding, hedgerow and coastal meadow.				
Mitigation Cross Reference	Frontage 2 • LANDSCAPE LAYOUT - LANG-ACM-LS-F2-DR-LA-011021 • SITE CLEARANCE PLAN - LANG-ACM-SC-F2-DR-ZZ-011031 • GENERAL ARRANGEMENT- LANG-ACM-ZZ-F2-DR-ZZ-011201 • TYPICAL DETAILS SHEET PILE WALL ALTERNATIVE - LANG-ACM-ZZ-F2-DR-ZZ-051204 • TYPICAL DETAILS SHEET PILE WALL ALTERNATIVE- LANG-ACM-ZZ-F2-DR-ZZ-051205 • TYPICAL DETAILS SHEET PILE WALL ALTERNATIVE- LANG-ACM-ZZ-F2-DR-ZZ-051206				

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V13

Existing



Extent of 50mm single frame image (27° field of view in portrait)

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

Proposed (Year 15)



Extent of 50mm single frame image (27° field of view in portrait)

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

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Langstone Costal Defence
Viewpoint 13

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Assessment of the Visual Effects on the Visual Receptors from Viewpoint 13					
Photo details **Direction of View: South west** **Distance to Site: 1.12km**					
Location – See Figure 2, Viewpoints Location Plan	The view was taken from Warblington cemetery around St Thomas á Beckett Church.				
Landscape Character/Scale	St Thomas á Beckett Church is a Grade 1 listed church. Both within the graveyard and to the boundary edge there are belts of mature deciduous and evergreen trees. Here are some fine examples of specimen trees and the symbolic planting of yew trees within the consecrated grounds. The church is located to the east of the village of Langstone. PRoW (108/56/3) runs through the graveyard and west along the shoreline to the eastern edge of the village. There it joins with numerous PRoW that traverse the area around the village surrounds.				
Foreground	Historic graveyard surrounding the church. Mature dense vegetation provides all year-round cover and shelter from Chichester harbour.				
Midground	No views out due to dense vegetative belts and flat topography.				
Background	No views out due to dense vegetative belts and flat topography.				
Receptor Type	**Receptor Sensitivity**	**Magnitude of Impact**		**Significance of Effect**	
		Construction	**Operation** *(Year 15 Summer/Winter)*	**Construction**	**Operation** *(Year 15 Summer)/Winter)*
Transient receptors – PRoW users (108/56/3)	Very High	None	None	Neutral	Neutral
Transient receptors – users of Warblington cemetery and St Thomas á Beckett Church	Very High	None	None	Neutral	Neutral
Comments on the Assessment of Potential Visual Effects	**Construction** **Summer and Winter** The blue wireframe shows the location and distance of the proposed works to Frontage 3, 4 and 5 from this viewpoint. The construction of and the construction equipment used will not be visible and will not impact on this setting. **Operation Year 15** **Summer and Winter** There will be no change in view.				
Mitigation Strategy: *screening, on and off site planting, ground modeling, design modifications, alternative materials, colors*	n/a				
Mitigation Cross Reference	n/a				

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V14

Existing



Extent of 50mm single frame image (27° field of view in portrait)

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

Proposed (Year 15)



Extent of 50mm single frame image (27° field of view in portrait)

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

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Langstone Costal Defence
Viewpoint 14

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Assessment of the Visual Effects on the Visual Receptors from Viewpoint 14						
Photo details **Direction of View: north** **Distance to Site: within the site**						
Location – See Figure 2, Viewpoints Location Plan	The view was taken from the Hayling Billy Line / Shipwrights Way. Theis a PRoW and cycleway between residential properties.					
Landscape Character/Scale	This follows the line of the existing Billy Line cycleway (A National Cycle Route 2 cycleway).					
Foreground	PRoW and a cycle route, between Langstone Road (A3023) to the south and Mill Lane to the north. Densely screened with mature to over-mature deciduous vegetation, with an understorey of native scrub species. Some ornamental plants from the neighboring garden have self-seeded. The back gardens of residential properties from Langstone Road and Mill Lane border this route. Some breaks in vegetation allows glimpse views out.					
Midground	Glimpse views out to some residents back gardens off Mill Lane.					
Background	No views out due to dense vegetative belts and housing.					
Receptor Type	**Receptor Sensitivity**	**Magnitude of Impact**		**Significance of Effect**		
		Construction	**Operation** *(Year 15 Summer/Winter)*	**Construction**	**Operation** *(Year 15 Summer)/Winter)*	
Transient receptors – Hayling Billy Line/Shrpwrights Way	High	Moderate	Minor	Moderate adverse	Neutral	
Comments on the Assessment of Potential Visual Effects	**Construction** **Summer and Winter** Existing footpath/cycleway will be widened to 3m. Tree clearance will be undertaken either side of the path. Some trees will be coppiced at ground level to enable retention. The path will be closed during construction. The Magnitude of Impact during construction would be moderate. There would be a significant loss of screening to high value and sensitive users, this includes resident's views would open up particularly in the winter months. The duration of effect would be reversible with screening measures reaching a similar level by Year 15. The Significance of Effect would be moderate adverse as the vegetation clearance would cause an obvious deterioration in the view of the receptor. **Operation Year 15** **Summer and Winter** The cycle path will be surfaced with asphalt with concrete edging. Native planting would have reestablished its screening capability. The Magnitude of Impact during operation Year 15 would be minor. The proposed planting will have matured at this stage and the landscape components, aesthetic, perceptual qualities, and character of this view will be restored. The Significance of Effect would be neutral. The mitigation measures would now blend into the landscape and help restore the sense of place.					
Mitigation Strategy: *screening, on and off site planting, ground modeling, design modifications, alternative materials, colors*	**Overall mitigation measures to that section of frontage.** Frontage 1A 1. Proposed new embankment on the existing footpath. 2. Reinstate New footpath on top of the new embankment. 3. Opportunities for native planting. 4. Potential seating, wayfinding and interpretation opportunities. 5. Proposed widening of shared cycleway/pathway from 1.9m to 3m to comply with highway standards.					
Mitigation Cross Reference	Frontage 1A • LANDSCAPE LAYOUT - LANG-ACM-LS-F1A-DR-LA-011020 • SITE CLEARANCE PLAN - LANG-ACM-SC-F1A-DR-ZZ-011030 • GENERAL ARRANGEMENT- LANG-ACM-ZZ-F1A-DR-ZZ-011101 • TYPICAL DETAILS - LANG-ACM-ZZ-F1A-DR-ZZ-051103					

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7. ASSESSMENT OF VISUAL EFFECTS- ZONE OF THEOROTICAL VISIBILITY

Zone Of Theoretical Visibility (ZTV) And Long Range Views

Existing Visual Analysis



1

ZTV Modelling

ZTV were modeled digitally to identify those areas of the landscape that theoretically will be visually connected to the Scheme. Figure 6:ZTV is based on a 5m meter digital terrain model (DTM) which stimulates a bare earth scenario. The DTM does not consider the surface detail of buildings and vegetation.

Figure 7: +ZTV takes account of the effect that topography, settlements and significant woodland blocks / belts will have on views towards the Scheme and therefore provides a relatively realistic illustration of areas within which the Scheme could theoretically be visible.

2

ZTV Parameters

The ZTV was modeled based on the following parameters and data sources:

- Ordnance Survey mapping at 1:25,000 scale;
- Ordnance Survey Landform Profile contour data at 5 m height intervals;
- Viewer eye height set at 1.6 m above ground level;

3

Actual Visibility

Actual visibility can only be determined on site. However, a ZTV analysis prior to the site visit can help to determine those areas that do not need further investigation. Site surveys are used to “ground truth” those areas shown on the ZTV as theoretically visible.



4

ZTV; Bare earth

The terrain model is usually, but not always, a bare-earth model; that is, it does not feature buildings, vegetation or other boundaries which may have a significant effect on the visibility of a development. This is the principal reason why it is known as a Zone of Theoretical Visibility.

Neither does the ZTV, of itself, take account of the effects of distance in reducing the significance of a development. It might be considered, therefore, that it is of limited use, but it does have particular benefits which, if used carefully, aid the landscape and visual impact assessment process.

The Bare Earth principle refers to the height data used for the analysis; this should represent only the terrain surface (i.e. excluding landscape features such as woodland and hedges etc.)

This principle ensures that the resulting map demonstrates a worst-case scenario and it allows us to determine exactly where the proposal cannot be seen from.

A Bare Earth ZTV objectively shows:

a. areas where the study point cannot be seen.

b. areas where the study point may be seen.

5

Bare Earth ZTV

1. Zone of the Theoretical Visibility has been generated using Environment Agency digital terrain modelling which does not take into account the screening effects of vegetation.

2. ZTV is based on an observer height of 1.6m.

6

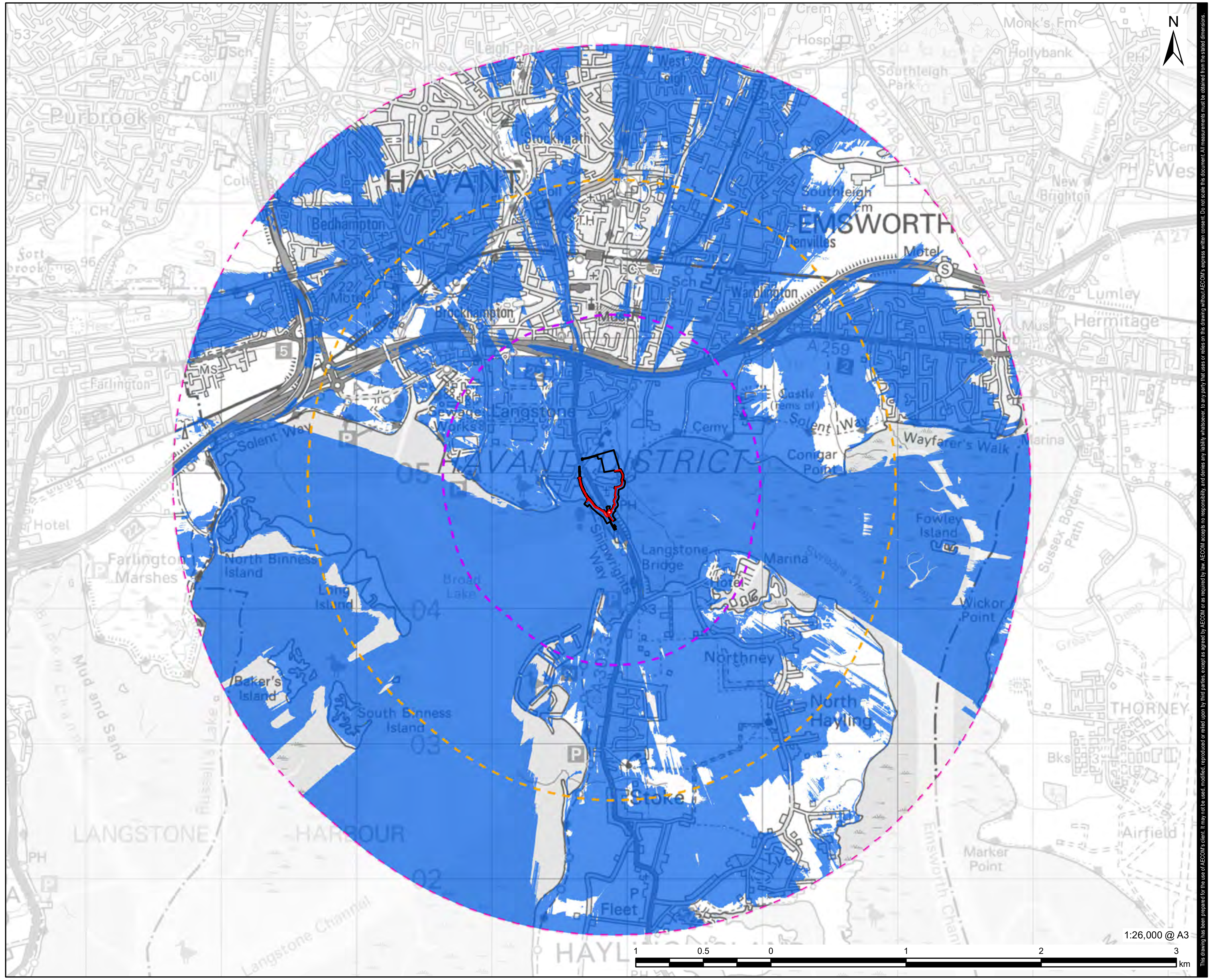
Barrier Earth ZTV

1. Zone of the Theoretical Visibility has been generated using Environment Agency digital terrain modelling which takes into account the screening effects of vegetation.

2. Woodland from the Forestry Commission National Forestry Inventory (2021) and OS Open data with an assumed height of 11m have been incorporated into the DTM.

2. ZTV is based on an observer height of 1.6m.

Revision: 0 Drawn: MAB Checked: LL Approved: SF Date: 2024-02-01



AECOM

PROJECT
Langstone Flood and Coastal Erosion Risk Management Scheme

CLIENT
Havant Borough Council

CONSULTANT
AECOM
Aldgate Tower,
2 Leman Street,
London, E1 8FA
aecom.com

LEGEND
- Core Scheme
- Red Line Boundary
- 1km Study Area from Red Line Boundary
- 2km Study Area from Red Line Boundary
- 3km Study Area from Red Line Boundary
- No Theoretical Visibilty
- Zone of Theoretical Visibility

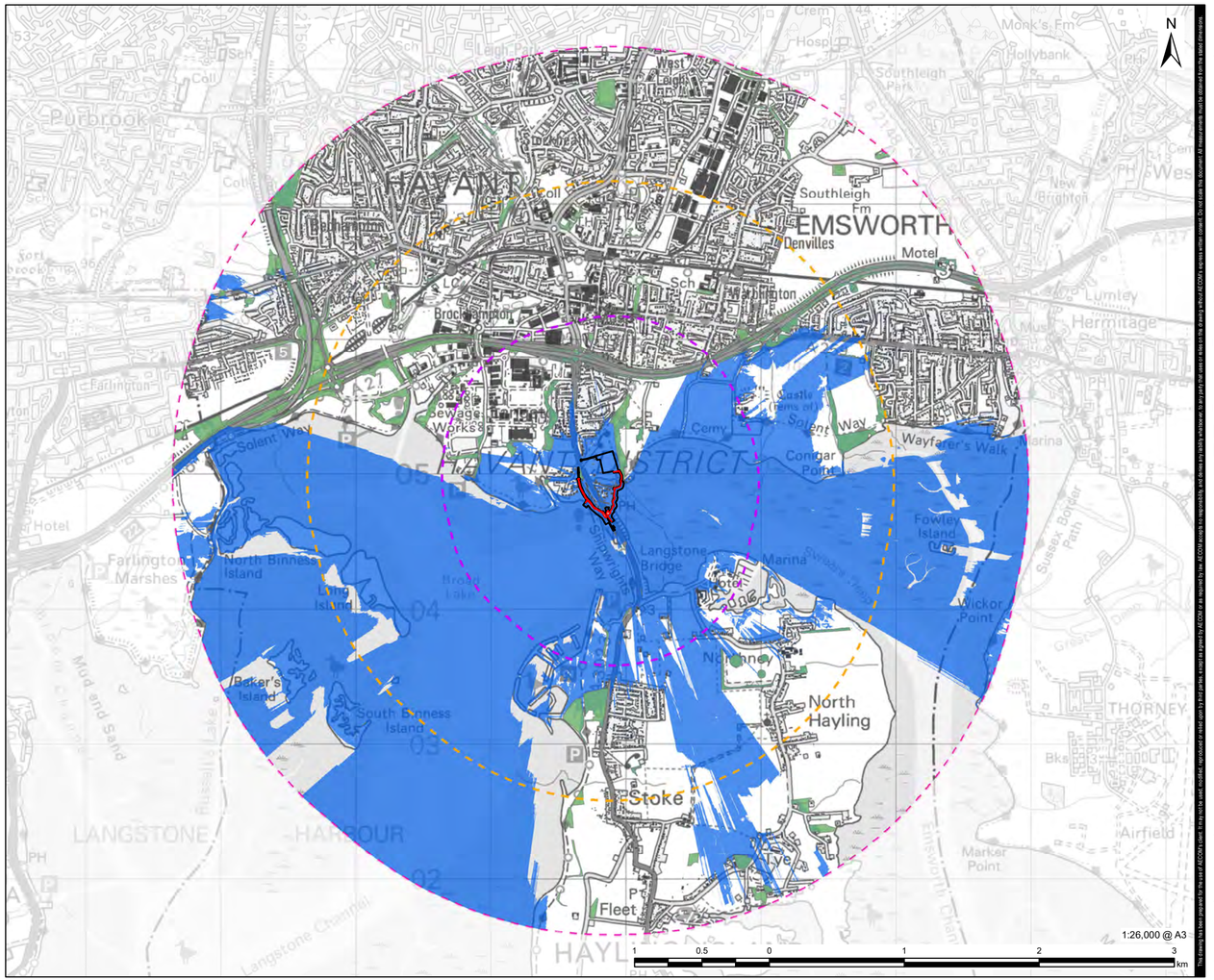
NOTES
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1) Zone of Theoretical Visibility (ZTV) has been generated using Environment Agency digital terrain model which does not take into account the screening effects of vegetation, buildings or any other structures.
2) ZTV based upon a set of point at various heights provided internally, within the Site Boundary and an observer height of 1.6m. The ZTV has been produced in order to inform 'on the ground' visual assessment.

ISSUE PURPOSE
DRAFT

PROJECT NUMBER
60656877

FIGURE TITLE
Zone of Theoretical Visitbility - Bare Earth - Core Scheme

FIGURE NUMBER
Figure 11



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Revision: 0 Drawn: MAB Checked: LL Approved: SF Date: 2024-02-01

AECOM

PROJECT

Langstone Flood and Coastal Erosion Risk Management Scheme

CLIENT

Havant Borough Council

CONSULTANT

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LEGEND

- Core Scheme
- Red Line Boundary
- 1km Study Area from Red Line Boundary
- 2km Study Area from Red Line Boundary
- 3km Study Area from Red Line Boundary
- Building
- Woodland
- No Theoretical Visibilty
- Zone of Theoretical Visibility

NOTES

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1) Zone of Theoretical Visibility (ZTV) has been generated using Environment Agency digital terrain model which takes into account the screening effects of vegetation. Woodland from the Forestry Commission National Forestry Inventory (2021) and OS Open Data, with an assumed height of 12m and Buildings from OS Open Data with an assumed height of 8m have been incorporated into the DTM, to mask any 'false' visibility from the top of trees and buildings.
2) ZTV based upon a set of point at various heights provided internally, within the Site Boundary and an observer height of 1.6m. The ZTV has been produced in order to inform 'on the ground' visual assessment.

ISSUE PURPOSE

DRAFT

PROJECT NUMBER

60656877

FIGURE TITLE

Zone of Theoretical Visitbility - Bare Earth - Core Scheme

FIGURE NUMBER

Figure 12

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Royal Oak looking towards the Mill

MITIGATION

08

8. MITIGATION

Landscape Strategy Report

The physical and cultural landscape informed, guided and shaped the layout and design of the landscape on site. This was done by creating a robust conceptual framework for development at an early stage in the design process. This landscape approach was carried out as a clear stepped process:

- Identify Site features
- Assess and Identify key landscape features
- Develop Landscape opportunities, as well as identifying constraints
- Develop Landscape Strategy
- Outline Masterplan development

The Masterplan maximised opportunities to develop and enhance green infrastructure while, delivering a wide range of social, environmental and economic benefits. The objective of the landscape strategy is to:

- enhance the ecological, recreational and amenity value of the Site;
- connect the development with the surrounding landscape; and
- Integrate the development into the local landscape.

Key Landscape Strategy Features:

SEAFRONT The seafront frontage is an ecologically sensitive area and provides an important buffer and backdrop. To enhance the frontage, the established meadow and wetland areas are extended along the southern boundary, the lowest southern part of the development. By creating such a significant landscape buffer in this area, the urban edge secures an appropriate transitional area and wildlife corridor between the development and surrounding countryside.

GREEN CORRIDORS The development will incorporate a coherent multi-functional green infrastructure network. To be multifunctional, the green infrastructure will incorporate a variety of uses such as amenity, sport and transport (cycle and pedestrian routes), as well as achieving other aims such as the incorporation of habitat creation. This approach ensures the maximum value is attained from the landscape scheme, and creates more used and vibrant spaces at the heart of the community

BOUNDARY PLANTING Along the western boundary a new strategic linear landscape strip with native tree and shrub planting and wildflower meadows will enhance the existing hedgerow and provide a soft and varied edge of settlement. Other boundaries will benefit from native planting, creating stronger green links and wildlife corridors.

Key development features for each of the frontages is outlined in the table opposite.

The proceeding pages a study of the different materials in and around the site was undertaken. A clear family of different building types has been established and these each play different roles within the masterplan.

Working like most large towns has grown and evolved over time to contain a range of architectural styles and material palettes within the village rather than a single local vernacular. This multitude of styles can be seen as a positive for the village which benefits from a number of high-quality historic buildings and a characterful areas.

Landscape Strategy	Foundation of approach
A landscape strategy and master planning principles as a foundation to structure space. There are a number of elements are key to compensation and landscape works defining the core area. 1. Planted spaces and major landscape features,such as tree belts, within the neighbourhood development areas, to meet the obligation to address heritage issues through a master planned approach. 2. The strategy as expressed in this document will be carried through to developer masterplans and project specifications. 3. Focused environmental improvements to the development and screen buffer area. 4. Maintaining the character and ecology of the living landscapes	Foundations of a Master planned Approach: Landscape Structure
5. Proposed new embankment on the existing footpath. 6. Reinstate footpath on top of the new embankment. 7. Opportunities for native planting. 8. Potential seating and wayfinding opportunities. 9. Ecological measures such as bat boxes to be included along the route.	Frontage 1 a
10. Proposed widening of shared cycleway/pathway from 1.9 m to 3m to comply with highway standards. 11. Recommendation for surface improvement. 12. Ecological measures such as Bee Posts to be included along the route. 13. Potential to enhance landscape, green space, footpaths, wayfinding signage and benches. 14. Potential for widening of existing shared cycleway/pathway and surface improvement. 15. Opportunity for wayfinding, interpretation boards and benches. 16. Reinstatement areas along improved shared cycleway/pathway to include species rich wildflower seeding.	Frontage 2
17. Proposed retaining wall and hand railings along the steps and ramp. 18. New retaining wall to be brick cladded. 19. New ramp, steps and handrails to be consistent with the overall landscape strategy. 20. Potential for interpretation boards, seating, wayfinding. 21. Opportunity to integrate seating as part of a flood defence wall. 22. Opportunity to include coastal planting. 23. Potential resurfacing to existing car park and 24. Potential bike rack/ cycle stands in the car park area.	Frontage 3
25. Proposed guardrails with chain access for kayaks and boats. 26. Potential to incorporate low level recessed lighting within the flint clad wall. Proposed lighting to be in accordance with the Dark Sky Policy. 27. Resurface existing pathway to match proposed pathway. 28. Historic Langstone Wadeway - opportunity for interpretation panel on land near here to explain history	Frontage 4
29. Integrate seating and pathway resurfacing. 30. New earth embankment and reinstatement areas grass seeded to agricultural use	Frontage 5

Enhancement Measures - Colour Palette

Paving, Street Furniture and Walling

The colour palette is designed to complement the distinctive character for the Langstone village and conservation areas by reflecting the local styles and adhearing to guidance within the Langstone Conservation Area Review (2011), please see Annex D. The palette references the pale hues of the site with the blue greys of the flint found within the chalk and traditionally used as a building material.

Primary Colours



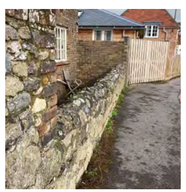
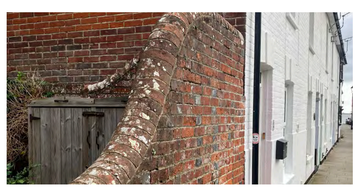
Opposite colours can be will be used as accent colours to enhance the urban realm elements. The colour palette proposed is designed to reflect the local context and the site's sea faring heritage. A specific palette of chalky concrete for paving and warm yellow as an accent colour in street furniture for these embankment areas

Accent Colours



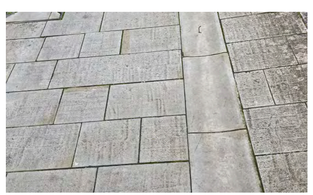
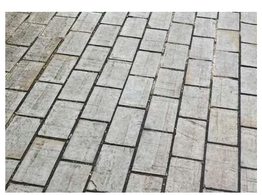
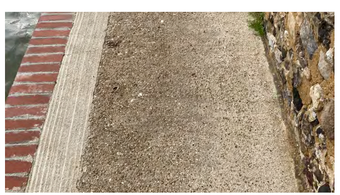
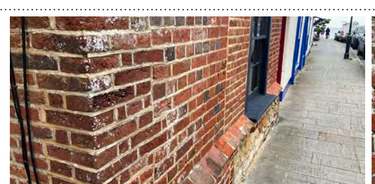
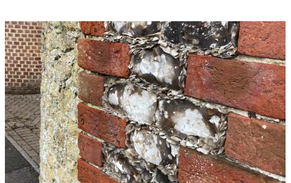
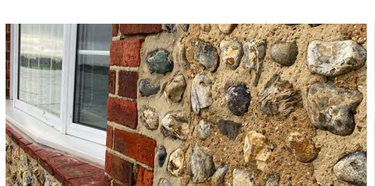
Enhancement Measures - Materiality

Open Space Design Assessment: Enhancement of Hardscape and Streetscape

Type	Function	Layout	Example Materials/Features
Wall - Basic coping	**Copings are the topping for a wall. Pier Caps are the topping for a pillar, also known as a 'pier'.** **Their purpose is to prevent rainwater running down the face of the brick-work, which can lead to problems with damp and colonisation by algae and other vegetation.**	The emphasis on the design is of a hard wearing product that is attractive and can be combined with other hard wearing element to provide seating that not only is an attractive feature in its self but adds to and complements the scheme.	      
Wall - Decorative copings			-     
Wall - Pier caps			    

Enhancement Measures - Materiality

Open Space Design Assessment: Enhancement of Hardscape and Streetscape

Type	Function	Layout	Example Materials/Features
Pavement	**Generally the pavements within the village are functional and are well worn. In some areas closer to the sea line, the paving has to make allowance for occasionally being under water.**	There are a miss match of styles , that in various states of repair. In places the repair has not been carried out sensitively. As well as being well weathered , the colour hue is muted and complements the building infrastructure, letting it shine. York stone has been used for the re-paving of part of Langstone High Street	    
Walling	**Building have been built in the vernacular style and have used locally sourced materials. The beautiful unique building styles and materials create a unique and distinctive style to the village. Different materials enhance and complement the colours of the bunding, creating distinctive features to the area.**	There is a predominance of the use of red brick in building near the seafront , with Flemish bond generally used. Flint is used on some buildings to the entire frontage and on some of the garden walls. It is also used to create a feature using contrasting mortars. The pattern style is generally random.	-      
Unique details and finishes	**Their scale and distinctive appearance of these finishes provide local landmarks adding to the strong sense of place and quality of the area.**	The circular raised flower bed in the first picture is built of brick and flint due to the tight knit nature of the urban development within the center of the conservation area including Langstone High Street,	    

SUMMARY AND CONCLUSIONS

09



Royal Oak

9. SUMMARY AND CONCLUSION

Conclusions on the Impacts on Landscape Receptors

The development is located along the coastline within Langstone village. This is a very high value landscape. For the purposes of this assessment the landscape and seascape character areas are considered together.

There are national level designated areas (AONB) to the eastern section of the site. The area is visited by a high number of people who come to experience this area due to the high quality of the landscape. Additionally the coastline provides extensive opportunities for outdoor recreation.

The sensitivity of the recreational receptor at construction stage would be very high,as this area has low capacity to absorb some of the effects of the construction. The magnitude of effect at construction stage would be minor/slight. This is due to the location of the development and the quality and components of the landscape. Construction activities such as vegetation clearance, building of structures and earth movements, would result in a disruptive character to the local landscape during the works. However construction effects would be largely temporary, in part reversible and intermittent throughout the construction phase. The impact would be moderate. This would not be significant.

On completion of construction the development would be within direct view of the residential/recreational (land and sea based) users. The majority of the development requires hard landscape mitigation measures. The presence of the development would have by year 15 softened and almost amalgamated into the surrounding area.

The design has been approached with understanding and sensitivity, and by Year 15 would not affect the character or sense of place.

The sensitivity of the receptor at operation stage would be very high. The magnitude of effect operation stage for both the LCA, AONB (National Landscape) would be negligible. The impact would be neutral.

This would not be significant**.**

Conclusions on the Impacts on Visual Receptors and Views

The greatest impacts occur within the closest proximity to the proposed development. The PRoW users will be most keenly affected. Several PRoW, long distance walking routes and cycle route will be closed or diverted during construction.

From viewpoint 1, 2, 5 and 12, the construction of Frontage 2, 3, 4 and 5 may be seen from this distance but would be barely perceptible within the wider view. In operation the works will not be perceptible from this viewpoint location.

The receptors closer to the development would experience the impact of the works to a greater degree. Construction works in and around their residential properties, closure of recreational routes and the views of the construction activities and movement will impact on their everyday lives.

Generally the Magnitude of Impact during the construction phase (with the closest viewpoints) will be moderate as the size and scale will give a noticeable change to a large proportion of the existing view. The Significance of Effect during construction would be moderate adverse, as there would be an adverse impact on some of the characteristic elements of this place and the sense of place. In addition, the receptor is of very high value and the construction works would introduce a discordant element into the view

The structure will be a positive and accords with district policy and supplementary planning documents . This includes:

- Havant Borough Core Strategy (Adopted 2011) (Ref. 2)
- Havant Borough Design Guide Supplementary Planning Document (Adopted 2011)
- Adopted Joint Chichester Harbour AONB SPD (Adopted 2017) (AONB now called National Landscapes)
- Langstone Conservation Area Review: Character Appraisal and Management Plan (Adopted 2011)
- Mill Lane Character Appraisal and Management Plan (Adopted 2017) and :
- Chichester Harbour Management Plan 2019 – 2024 (Adopted 2019).

Generally the Magnitude of Impact during operation Year 15 will be minor. There are minor alternations to the key elements and the introduction of some additional safety elements, that are uncharacteristic of the original scheme. The ease of interaction between the recreational users and the sea edge has been lost in some areas due to the introduction of a flood walls. The symbiotic relationship between the coast and its people are an important factor in the enjoyment of this coastal zone. Recreation activities with the seascape are part of the tradition of village life and would be retained as well as protection from flooding.

The Significance of Effect for viewpoints 1, 2, 5,10,12,13 and 14 would be neutral, as the mitigation measures would now blend into the landscape and help restore the sense of place. Viewpoint 3 is negligible adverse, as there would be a barely perceptible impact on the change in the view. Viewpoint 4, 6, 7, 8, 9 and 11 would be slight adverse as the flood defence hard landscape materials have been sensitively incorporated into the overall scheme and would age, distress, weather and soften into the more historic hard landscape elements, the newness of the materials would be slightly noticeable upon closer inspection.

Sea level rise will lead to increasing frequency and severity of flooding affecting large part of the village. Currently shallow flooding occurs from tidal surges a few times a year. Over the next 50 years this is likely to become very regular, deeper and more extensive. Without the scheme this could lead to a progressive reduction in the character and features that comprise the village.

Considerable exploration of the style and finish of the built structures has been undertaken, in order to make it a pleasing facade and designed with less of a functional look. This design has evolved following close engagement with the community and the conservation officer. The materials complement it's historic surrounds, and makes the structures easy on the eye. The structure will be positive in terms of its architectural style and finesse and will blend well with the attractive seascape frontage.

GLOSSARY OF TERMS

Term	Defination
Baseline	Also referred to as the 'baseline situation', this term describes the existing nature of the landscape and the visual environment within the study area at a fixed point in time, as well as any changes likely to occur independently of the Scheme, including the legislative and planning context and any relevant published guidance.
Construction	Construction, also referred to as the construction phase, refers to the all activity on and offsite required to implement the Scheme. The construction phase is considered to commence with the first activity on site, for example the creation of site access or site clearance works, and ends with demobilisation.
Demobilisation	This term refers to the completion and the removal of physical and manpower resources from a construction site at the completion of the construction phase.
Designated Landscape	Area(s) of land identified as being of importance at international, national or local levels, either defined by statute or identified in development plan or other documents.
Development	Any proposal that results in a change to the landscape and / or visual environment.
Effect	The nature of the change(s) likely to occur as a result of a particular impact.
Direct effect	An effect that is directly attributable to the Scheme.
Indirect effect	An effect that results from the Scheme as a consequence of a direct effect(s), often occurring away from the Site, or as a result of a sequence of interrelationships or a complex pathway.
Element	Individual parts which make up the landscape, for example trees, hedgerows or buildings.
Enabling works	Enabling works cover those activities and preparations required to make a site construction ready and include the creation of access roads, and installation of security fencing, hoarding, signage and site compound(s). Enabling works are considered to occur during the construction phase.
Enhancement	Measures that seek to improve the landscape of the Site and / or its wider setting beyond its baseline condition.
Feature	Prominent or eye-catching elements in the landscape, such as wooded skylines, parkland trees, church spires, or a particular aspect of the Scheme.
Impact	This term describes the action being undertaken, for example construction of the Scheme or the removal of landscape features.
Key characteristic	The combination of elements which are particularly important to the current character of the landscape and help to give an area its particularly distinctive sense of place.
Land cover	This term relates to the surface cover of the land and is usually expressed in terms of vegetation cover or lack thereof.
Land use	This term refers to what land is used for and is based on broad categories such as urban, industrial, agriculture or forestry.
Landform	The shape and form of the land surface resulting from combinations of geology, geomorphology, slope, elevation and physical processes.

Landscape character	A distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.
Landscape Character Area (LCA)	Single unique areas which are discreet geographical areas of a particular landscape type.
Landscape Character Assessment	The process of identifying and describing variation in the character of the landscape and using this information to assist in managing change in the landscape.
Landscape Character Type (LCT)	Distinct types of landscape that are relatively homogenous in character. They are generic in nature in that they may occur in different parts of the country, but wherever they occur they share broadly similar combinations of geology, topography, drainage patterns, vegetation and historical land use and settlement pattern, and perceptual and aesthetic attributes.
Landscape quality / condition	A measure of the physical state of the landscape. It may include the extent to which the character typical of the area id represented in individual locations, the intactness of the landscape and the condition of individual elements.
Landscape receptor	The constituent features and elements of the landscape, its specific or perceptual qualities and its character considered in relation to the Scheme.
Landscape resource	This term refers to the character and all features, elements and qualities of the landscape, which is defined by the European Landscape Convention (ELC) as follows: "Landscape is an area, as perceived by people, whose character is the result of the action and interaction of natural and / or human factors" (Council of Europe, 2000). The landscape resource concerns all types of landscape within the study area and covers "natural, rural, urban and peri-urban areas. It includes land, inland water and marine areas. It concerns landscapes that might be considered outstanding as well as every day or degrade landscapes" (Article 2 of the ELC, Council of Europe, 2000).
(The) Landscape scheme	The landscape design for the Scheme, incorporating all landscape mitigation and enhancement measures.
Landscape value	The relative value that is attached to landscapes by society, which may vary depending on the nature of the stakeholder.
Magnitude of change	A judgement regarding the size and scale of the change, the geographical extent of the area that will be affected and the duration of the effect and its reversibility.
Mitigation	This term refers to those measures that are proposed to prevent / avoid, reduce and where possible offset any adverse effects.
Open Access Land	Land where the public have access either by legal right or informal agreement, within which certain activities may be restricted.
Operation	Also referred to as completion, this term describes the operation phase of the completed development and is considered to commence at the end of the construction phase, after demobilisation. The duration of the operation phase is dependent on the nature of the Scheme.

GLOSSARY OF TERMS

Perception / perceptible	A term used to describe the sensory (i.e. received through human senses) with the cognitive (i.e. knowledge and understanding gained from many sources and experiences).
Permissive Paths	A path over which there is no formal right of access (i.e. not a public right of way) whose use by the public is allowed by the landowner.
The Scheme	The Scheme is the 'fixed' or 'frozen' design of the scheme for which planning consent is sought.
Public Right of Way	In England and Wales public rights of way are routes on which the public have a legally protected right to pass. These include footpaths, bridleways, byways open to all traffic and restricted byways.
Receptor	See 'Landscape Receptor' and 'Visual Receptor'.
Sensitivity (of a receptor)	A judgement regarding the susceptibility of a receptor to the change arising as a result of the Scheme and the value attached to the receptor.
Significance of effect	The level or importance of landscape and visual effects, determined by considering together sequentially the sensitivity of the receptor with the magnitude of effect.
Stakeholder	The whole constituency of individuals and groups who have an interest in a subject, place or landscape.
Study area	The area within which it is considered that changes arising as a result of the Scheme will result in the highest and / or most important direct or indirect effects.
Topography	Local detail or specific features of landform.
Tranquil / tranquillity	A state of calm and quietude associated with peace and considered to be an important asset of landscape.
Viewpoint	The location from which photographs that describe specific or representative views toward the Scheme are captured.
Visual amenity	The overall pleasantness of the views people enjoy of their surroundings, which provides the setting or backdrop for the enjoyment of peoples activities.
Visual envelope	The approximate geographical area(s) from within which full or partial views of the Scheme will be possible.
Visual receptor	Individuals and / or defined groups of people who have the potential to be affected by the Scheme.
Worst case	Reasonable prediction of the scenario that will result in the highest level of effect(s).
Zone of Theoretical Visibility (ZTV)	Those areas of the landscape that theoretically are visually connected with the Scheme.

Annex A - Methodology

1.0 Assessment Methodology

3.1 Guidelines

The following methodology and references to published documents may refer in places to LVIA. However, this 'lighter' non- statutory Landscape and Visual Appraisal (LVA) is deemed appropriate for the proposed type and level of development. The LVA is therefore carried out in accordance with best practice as set out in the following published guidance, which is regarded by the landscape profession as the 'industry standard':

- "Guidelines for Landscape and Visual Impact Assessment" (GLVIA3) -Landscape Institute/Institute of Environmental Management and Assessment, Third Edition, 2013
- GLVIA 3 Statement of Clarification 1/13 (2013), published by the Landscape Institute
- Landscape Institute Advice Note 01/11 (2011), "Photography and Photomontage in Landscape and Visual Impact Assessment", published by the Landscape Institute
- An Approach to Landscape Character Assessment, published by Natural England

GLVIA3 states that:

"Landscape and Visual Impact Assessment (LVIA) is a tool used to identify and assess the significance of and the effects of change resulting from development on both the landscape as an environmental resource in its own right and on people's views and amenity".

GLVIA3 makes clear that professional judgement is a very important part of LVIA. Whilst there is some scope for quantitative measurement of objective matters i.e. number of trees lost, much of the assessment relies on qualitative judgements, for example - the effect of the introduction of a new development or land use change may have on visual amenity, or the level of change in the character of the landscape and whether it is positive or negative. Professional judgements are based upon training and experience and should be made by experienced landscape professionals. Ideally more than one person should be involved in the assessment to provide checks and balances, particularly in identifying the likely levels of effects. It is essential that the methodology used is fully explained and transparent and that the LVIA is carried out objectively:

"In all cases there is a need for the judgements that are made to be reasonable and based on clear and transparent methods so that the reasoning applied at different stages can be traced and examined by others" (GLVIA3).

3.2 Determining the Study Area

When establishing the study area the emphasis is on a reasonable approach which is proportional to the scale and nature of the Proposed Development. The study area for the LVA has been defined in accordance with GLVIA3 (Landscape Institute and Institute of Environmental Management & Assessment, 2013). This advises that the study area should, "cover the site itself and its wider context, within which the Proposed Development may influence it in a significant manner".

The extent of the study area for the assessment has been determined by an on site appraisal of the site's visibility and the existing physical characteristics of the landscape and has been set to a 1km offset from the proposed scheme.

As part of the scoping and consultation stages, specific views and receptors were identified that would need to be checked and assessed as part of this LVA. These are:

- Local residents who live at Bromwich Road, Weir Lane, Diglis Dock Road, Navigation Road located west and east of the site.
- Workers within the Worcester Sewage Works.
- Users of the A449 one of the main roads leading into Worcester city.
- Users include vehicle drivers and passengers and pedestrians on a footpath between the works and the road.
- Users of PRoW/footpaths along the Severn River.

3.3 Viewpoints

A number of viewpoints representative of the visual baseline have been included in Section 6.0.

These were selected during a site visit on the 31st July 2023, when vegetation was in full leaf.

These comprise views experienced from informal paths within the parkland, public roads and recreational viewpoints.

3.4 Assessment Stages

A detailed description of the methodology for evaluating the landscape and visual effects is set out below. At the outset it is useful to reiterate the definition of the terms 'landscape effects' and 'visual effects':

- Landscape effects: Effects specifically on the physical landscape
- Visual effects: Effects on specific views and on the general visual amenity experienced by people

The initial step in an LVA is to establish the baseline landscape and visual conditions. The level of detail provided should be that which is reasonably required to determine and assess the likely effects.

The assessment must clearly distinguish between the assessment of landscape effects dealing with changes to the landscape as a resource, and the assessment of visual effects, dealing with changes to views and visual amenity.

Once the landscape baseline and visual baseline are established, the levels of effects are assessed. The landscape effects and visual effects of the proposals are assessed separately.

3.5 Landscape Appraisal

In order to gain an understanding of the landscape character and value attached to the landscape within which the site lies, a desktop study of the site and surrounding area was carried out. This identified all relevant landscape, cultural and heritage and nature conservations designations within the study area and included all public rights of way (PROW).

The landscape baseline is an important contributory factor in determining which viewpoints are selected for inclusion in the visual appraisal. The information collated is a result of background and baseline desktop studies, on-the-ground surveys and analysis of landscape character.

It includes the landscape planning context for the site, with a review of the key designations and the current planning policies and guidance relevant to the proposed development.

The baseline factors that are taken into account include national designations such as; County wide / local designations such as Listed Buildings, heritage and cultural assets, ancient woodlands and wildlife habitats. National and local-level recreational areas and access such as public rights of way (PRoWs) and scenic viewpoints.

3.5.1 Data Sources + Desk Study

The baseline information has been obtained from a number of sources, including:

- Natural England's database of National Character Areas
- Worcester City Council website resources
- MAGIC (DEFRA) interactive GIS dataset
- Historic England (various sources)
- Topographical Survey
- Google Earth

3.5.2 Landscape Receptor

The first step is to identify the components of the landscape that are likely to be affected as part of the existing baseline situation:

- The character of the landscape identifying the components that contribute to it i.e. topography, land use, vegetation, settlement patterns
- Any individual elements and aesthetic and perceptual aspects of the landscape that contribute to the distinctive character of the landscape.
- The condition or the physical state of the landscape, including the condition of elements or features such as buildings, industry, vegetation/woodland and any evidence of current pressures causing change.
- The value placed upon the landscape

The second step is to identify interactions between the landscape receptors and different components of the development at all its different stages, including construction, on completion/operation and where relevant decommissioning and restoration/reinstatement.

3.5.3 Landscape Sensitivity

Determining levels of landscape sensitivity (the nature of receptor likely to be affected) is an important part of the LVIA process. Sensitivity is combined with the magnitude of change likely to occur (this is assessed later on in the process), along with professional judgement in order to determine the overall level of the landscape effects.

The sensitivity of landscape receptors is assessed by combining judgements on the value attached to the landscape resource and its susceptibility to the type of change proposed, i.e. a judgement about the nature of the proposed development in relation to the ability of the baseline landscape to accept that change. The sensitivity of landscape receptors will vary therefore depending on the type and nature of development proposed.

The sensitivity of landscape receptors is described using a five point scale: Very High; High/Very High; High; medium; Low/Medium; Low or Very Low. Intermediate levels of sensitivity can also be attributed to receptors where relevant.

As seen in Table A ; Guidelines for the Assessment of Landscape Sensitivity opposite.

3.5.4 Magnitude of Landscape Effects

The magnitude of change in the landscape is influenced by a number of factors including the extent to which landscape features are lost and/or altered, the introduction of new features in the landscape, and the resulting change in the physical and/or perceptual characteristics of the landscape. For each of the landscape receptors a clear approach is taken to assess the potential magnitude of impact. It is evaluated in terms of:

- The size and scale of the impact
- The geographical extent of the area which is likely to be affected
- The duration or the impact and its reversibility.

The magnitude of landscape change is described using a five-point word scale. Magnitude is assessed as being: Major; Moderate; Minor; Negligible; or None. The judgements based on objectively-determined criteria and professional reasoning.

Size or scale

Professional judgement takes account of:

Table A: Guidelines for the Assessment of Landscape Sensitivity

Sensitivity	Description
Very High	**Very highly valued** with international and national level designated areas (e.g. World Heritage Sites, National Parks, AONB's, Registered Historic Parks and Gardens, Scheduled Monuments, Grade I or II* Listed Buildings, SSSI's etc.) and is experienced by a high number of people where the quality of the landscape is likely to be the primary purpose of the visit. Exceptional aesthetic attributes with significant scenic quality and iconic views. An important component of the country's character with very rare and distinctive elements and features. Landscape condition is very good and maintained to a high standard. The landscape has elevated perceptual qualities and is highly valued for its wildness / remoteness and level of tranquility. No detracting features present. A landscape with a very low capacity to accommodate the type of development proposed, with components that cannot be replaced (e.g. ancient woodland, historic parkland. **A landscape or component with a very high susceptibility/vulnerability to change.**
High	**Highly valued** with regional or county level designated areas (e.g. Areas of Great Landscape Value (AGLV), Green Belt, Country Parks, Grade II Listed Buildings and Conservation Areas etc.) and experienced by many people where the quality of the landscape is likely to be one of the main reasons for the visit. High aesthetic attributes with significant scenic quality and views. An important component of the region or county's character with rare or distinctive elements and /or features. Landscape condition is good and is generally well maintained. The landscape has very good perceptual qualities and a high level of tranquility. A landscape with a low capacity to accommodate the type of development proposed, with components that are not easily replaced (e.g. ancient woodland, historic parkland. No detracting features present. **A landscape or component with a high susceptibility/vulnerability to change.**
Medium	**Moderately valued** but no designated landscapes present - may be valued locally (e.g. village greens, allotments or public open spaces etc.). The landscape is unlikely to be one of the main reasons for the visit but makes a positive contribution to the experience. Commonplace elements / features present in good to fair condition, some of which could not be replaced but are a good to fair representation of the landscape type, but common. Generally unremarkable character, albeit with some sense of place. The landscape has good to fair perceptual qualities and a moderate level of tranquility. Some detracting features present. A landscape with a moderate capacity to accommodate the type of development proposed with some resilience to, and tolerance of, change. **A landscape or component with a moderate susceptibility/vulnerability to change.**
Low	**Low value** – of low importance, low quality and in fair to poor condition, with few features of value or interest. The landscape has little or no amenity value – and is unlikely to be one of the main reasons for the visit Rare or distinctive elements and / or features are not present. Several or many elements / features are discordant, derelict, in decline or lost, resulting in little or no positive contribution to landscape character and / or visual amenity. All landscape elements are easily replaceable. The landscape has few, if any, perceptual qualities and is of low tranquility. Several detractors present. A landscape with a high capacity to accommodate the type of development proposed and relatively resilient to change. **A landscape or component with a low susceptibility/vulnerability to change.**
Very Low	**Very low value** – a degraded landscape, likely to be industrial or contaminated land, with no amenity value – and there is unlikely to be a reason to visit for recreational use. A landscape of very low quality and in poor condition, with very low potential for biodiversity. The landscape has no perceptual qualities and is not considered to be tranquil. Widespread detractors present. Most elements / features are discordant, derelict, in decline or lost altogether, resulting in negative effects on character with all intrinsic sense of place lost. Little prospect of improvement. A landscape with a large capacity to accommodate the type of development proposed and very resilient to change. **A landscape or component with a very low susceptibility/vulnerability to change.**

- Landscape function - the extent of existing elements lost, - the proportion this represents and the contribution that element makes to the character of the landscape
- The degree to which aesthetic or perceptual aspects of the landscape are altered by removal of existing landscape components and addition of new ones (i.e. loss of hedgerows may change a small-scale intimate landscape into a large-scale open one)
- Whether the effect changes key characteristics of the landscape which are critical to its distinctive character

Geographical extent

The geographical area over which the landscape effects will be felt should be considered. This is different to the size or scale i.e. a moderate loss of landscape elements over a large geographical area or a major loss of landscape elements affecting a very localised area. Effects may have an influence at a variety of scales:

- site level within the development site itself
- immediate setting of the site
- scale of the landscape type or character area within which the proposal lies
- larger scale influencing several landscape types or character areas

Duration and reversibility

Duration is judged on time scale: Temporary (during construction), short term (0-5 years), medium term (5-10 years) or long term (10-25 years+).

Reversibility is about whether the development is permanent or if there are prospects of the effects being reversed (i.e. housing is viewed as permanent but mineral workings may be partially reversible, in that the landscape can be restored after use to something similar, but not the same, as the original).

3.6 Visual Appraisal

The visual appraisal considers how the proposed development will affect specific views and the general visual amenity experienced by people.

3.6.1 Visual Receptors

Visual receptors are people and comprise individuals or groups of people who are likely to be affected by the proposed development at specific viewpoints or series of viewpoints.

A number of viewpoints representative of the baseline visual situation have been selected for inclusion in the appraisal:

- Representative viewpoints – selected to represent the experience of different types of visual receptor, where large numbers of viewpoints cannot all be included individually and where the levels of effects are unlikely to differ – e.g. certain points may be chosen to represent the views of users of particular public footpaths and bridleways;
- Specific viewpoints – chosen because they are sometimes promoted viewpoints within the landscape e.g. specific local visitor attractions; viewpoints in areas of particularly noteworthy visual and/or recreational amenity such as landscapes with statutory landscape designations or viewpoints with particular cultural landscape associations;

Table B: Criteria for determining magnitude of landscape change

Magnitude of Effect	Landscape
Major	Major alteration to, or complete loss of, key elements, features and characteristics of the baseline condition. The size and scale and/or geographical extents of change are considered large due to the extent and proportion of loss of existing landscape components and extent of alteration of aesthetic and perceptual qualities which are critical to the landscape character. The duration of effect would be considered long term and would either be irreversible or very difficult to reverse in practical terms.
Moderate	Notable alteration to, or significant loss of, key elements, features and characteristics of the baseline condition. The size and scale and/or geographical extents of change are considered medium due to the extent and proportion of loss of existing landscape components and extent of alteration to aesthetic and perceptual qualities and would cause a noticeable difference to the landscape character or existing landscape components. The duration of effect would be considered medium term and / or potentially reversible, although it may not be practical to do so.
Minor	Minor alterations to key elements, features and characteristics of the baseline condition. The size and scale and/or geographical extents of change are considered low due to the extent and proportion of loss of existing landscape components and extent of alteration to aesthetic and perceptual qualities and would cause a very small change to the landscape character and/or existing landscape components. The duration of effect would be considered short term and / or potentially reversible, and in practical terms would easily be achievable.
Negligible	Barely discernible alterations to key elements, features and characteristics of the baseline condition. The proposed scheme would be barely perceptible or entirely appropriate in its context and would cause no perceptible change to its landscape components, aesthetic and perceptual qualities and character. The duration of effect would be considered short term / temporary and / or easily reversible, and in practical terms would very easily be achievable.
None	No change to the baseline condition.

A photograph from each selected viewpoint (visual receptor) was taken to record the existing view using a high quality Digital Single Lens Reflex (SLR) camera with the equivalent of a 50mm focal length manual lens, typically with five frames per view, which represents the normal breadth of vision, as advocated by the Landscape Institute - Advice Note 01/11, Photography and photo-montage in LVIA. Photographs were taken at eye level, approximately 1.70m above ground level, from public viewpoints.

3.6.2 Sensitivity of Visual Receptors

Evaluating the sensitivity of each visual receptor requires consideration of both the visual receptor's susceptibility to change arising from the proposal, and the value attached to the view by the receptor:

Susceptibility to Change + Value = Sensitivity.

The susceptibility of different visual receptors to change in their view and visual amenity is mainly a function of:

- The occupation or activity of people experiencing the view at a particular location
- The extent to which the attention or interest is focused on the view and the visual amenity people experience

A view is valued through formal designation and/or indicators of value attached by people. This takes account of:

- Recognition of the value attached to a view through planning designations and / or in relation to heritage assets and indicators of the value attached to views by visitors e.g. featuring in guidebooks or on tourist maps
- Provision of facilities for their enjoyment i.e. parking places, and interpretive boards
- References to them in literature or art e.g. 'Ruskin's View' over Lunedale

Sensitivity is recorded as: Very High; High; Medium; Low; or Very Low. Sensitivity is specific to each visual receptor and reflects a balanced judgement on the value attached to the view by the receptor, their visual amenity and susceptibility of the receptor to the type of change proposed. The judgement made is supported by a clear written rationale and supported by the guidelines in Table C: Guidelines for the Assessment of Visual Receptor Sensitivity.

3.6.2 Magnitude of Visual Effects

The magnitude of change on visual receptors is influenced by a number of factors including; the extent to which the view and visual amenity of people arising as a result of the proposed development is lost and/or altered, the introduction of new features in the view, and the resulting change in the view. For each of the visual receptors a clear approach is taken to assess the potential magnitude of impact. It is evaluated in terms of:

- The size and scale of the impact
- The geographical extent of the area which is likely to be affected
- The duration or the impact and its reversibility
- The magnitude of visual impact is described using a five point scale. Magnitude is assessed as being major, moderate, minor, and negligible or none. The judgement made is reliant upon by a clear written rationale and professional judgement with reference to the guidelines in Table D

3.7 Determining the Level of Landscape and Visual Effects

Judging the overall level of landscape and visual effects for each receptor is carried out through a sequential combination of:

Assessment of sensitivity + Assessment of magnitude = Level/nature/duration of effect.

The overall judgment about the nature, level and duration of these effects are based on the sequential combination of each criterion, leading to a balanced justification.

Table E, Matrix for determining the Level of Landscape and Visual Effects, illustrates how the effect is determined by a combination of the level of sensitivity of a receptor and the level of magnitude of effect arising from the development.

The matrix is a guide and not an absolute scoring system. It is reliant on clear, written rationale and professional judgement.

In this assessment therefore, judgements are made about the level of effects, referred to by their importance rather than significance, with the assessment then used to determine whether these effects are likely to be relevant to the decision making process.

Determining the effects likely to arise as a result of the proposed development and determining their importance requires the application of professional judgement: the predicted levels of sensitivity of the receptors are considered with the predicted levels of magnitude of effect. Overall effects can be beneficial, adverse or neutral.

Table C: Guidelines for the Assessment of Visual Receptor Sensitivity

Sensitivity	Description
Very High	**A viewer with a very high susceptibility/vulnerability to change;** with a specific interest in the view, prolonged viewing opportunities and **a very high value placed upon the view.** Examples include: • Visitors to very high value landscapes and townscapes • Receptors in Internationally or Nationally designated sites such as World Heritage Sites, National Parks, Areas of Outstanding Natural Beauty (AONB), Special Landscape Areas, National Trails, Registered Parks and Gardens, Scheduled Monuments, Grade I and II* listed buildings; • Recognised scenic travel routes and other places where the views are the major contributor to the visit. Internationally / Nationally important visual function (context, setting, gateway, gap, screen, buffer, transition zone, skyline, panorama, vista, focal point, cultural association etc.). Highly visible in the wider area.
High	**A viewer with a high susceptibility/vulnerability to change;** with a particular interest in the view, prolonged viewing opportunities and **a high value placed upon the view.** Examples include: • Receptors in landscapes of Regional or County importance (e.g. Areas of Great Landscape Value (AGLV), country parks, long distance trails, Grade II listed buildings, Conservation Areas etc.). • Views from other important /valued/well-used visitor destinations and recreation areas, including long distance / themed trails, touring routes, cycle paths, canals, rights of way used by many people where the view is an important reason for the visit; • People in high value landscapes and townscapes where views contribute to the high value landscape setting; • Residents at home using rooms normally occupied during daytime hours and are likely to experience prolonged views. Important wider visual function. Visible in the wider area.
Medium	**A viewer with a moderate susceptibility/vulnerability to change;** with some interest in their surroundings, a medium period of exposure to the view and **a moderate value placed upon the view.** Examples include: • People whose attention is not solely focused on the view or for short periods of time while passing through the landscape / townscape • People in involved in outdoor recreational facilities where landscape appreciation is unlikely to be a primary motive i.e. fishing or golf • Users of scenic road, rail or waterway corridors not used by many people and where the view is only part of the reason for the visit; • Residents with limited view of the development; • People at their place of work/educational institutions where visual amenity is an important contributor to the setting and quality of working life. Important local visual function. Locally visible but limited influence.
Low	**A viewer with a low susceptibility/vulnerability to change;** with little or no interest in their surroundings, attention not focused on the landscape and **a low value placed on the view.** Examples include: • People using busy main roads where their view is focused on the road; • People at their place of work where the appreciation of the setting is of limited importance to the quality of working life; • People engaged in outdoor recreation or sport which does not involve or depend upon an appreciation of views; • People using infrequently used / inaccessible public rights of way and likely to be travelling for a purpose other than to enjoy the view. Usually in landscapes / townscapes of low to moderate value. Not important visual function. Limited local visibility.
Very Low	**A viewer with a very low susceptibility/vulnerability to change**; with no interest in their surroundings, attention not focused on the landscape and **a very low value placed on the view.** Examples include: • People moving past the view often at high speed (e.g. motorways and main line railways); People in degraded landscapes / townscapes of low value. No visual function and no visibility.

Table D: Criteria to Determine the Magnitude of Visual Effects

Magnitude of Effect	Visual Effect
Major	The size and scale and/or geographical extent of change is considered substantial and would cause a major deterioration in, or change to, a large proportion of the existing view. The duration of effect would be considered long term and would either be irreversible or very difficult to reverse in practical terms.
Moderate	The size and scale and/or geographical extent of change is considered to cause a noticeable change to a large proportion of the existing view, or significant deterioration in or a significant change to a smaller proportion of the existing view. The duration of effect would be considered medium term and / or potentially reversible, although it may not be practical to do so.
Minor	The size and scale and/or geographical extent of change would cause a small change or small deterioration in or change to the existing view. The duration of effect would be considered short term and / or potentially reversible, and in practical terms would easily be achievable.
Negligible	The development is at such a distance as to be barely perceptible and may go unnoticed. The duration of effect would be considered short term / temporary and / or easily reversible, and in practical terms would very easily be achievable.
None	No change to the existing baseline view.

Table E: Matrix for determining landscape and visual effects

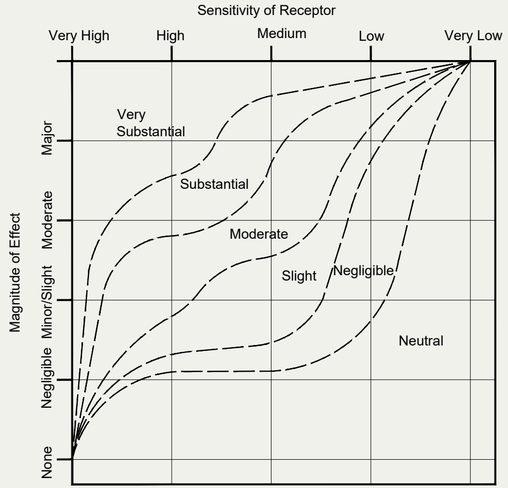


Table F: Criteria for determining the level of landscape and visual effects

Effect	Description. The proposed development would:
Very Substantial Adverse	• Be at complete variance with the character of the landscape • Cause total permanent loss or major alteration to a wide range of characteristic elements and features of the landscape • Permanently damage the sense of place • Cause a major deterioration to the view of a receptor of very high sensitivity that would constitute a total change in the view and / or introduce a major discordant element into the view
Substantial Adverse	• Be at considerable variance with the character of the landscape • Degrade or diminish the integrity of a wide range of characteristic elements and features of the landscape • Substantially damage the sense of place • Cause a major deterioration to the view of a receptor of high sensitivity that would constitute a total change in the view or introduce a major discordant element into the view
Moderate Adverse	• Conflict with the character of the landscape • Have an adverse impact on some characteristic elements and features of the landscape • Diminish the sense of place • Cause an obvious deterioration to the view of a receptor of medium to high sensitivity that would constitute a clear change in the view or introduce a discordant element into the view
Slight Adverse	• Not quite fit with the character of the landscape • Be at odds with some of the characteristic elements and features of the landscape • Detract from the sense of place • Cause a limited deterioration to the view of a receptor of medium to high sensitivity that would constitute a noticeable change in the view or would introduce uncharacteristic features or elements into the view; or, an obvious deterioration to the view of low sensitivity.
Negligible Adverse	• Result in a barely perceptible deterioration of landscape character • Have a barely perceptible impact on characteristic elements and features of the landscape • Barely degrade the sense of place • Result in a barely perceptible change in the view, associated with the introduction of uncharacteristic features or elements
Neutral	• Maintain the existing character of the landscape • Blend in with the characteristic elements and features • Enable the sense of place to be maintained • Not be visible to the receptor and any associated mitigation would represent an indiscernible change to the baseline situation
Negligible Beneficial	• Result in a barely perceptible improvement in the character of the landscape • Provide limited enhancement of characteristic elements and features • Barely improve the sense of place • Result in a barely perceptual change and improvement to the view, associated with the introduction of characteristic features or elements
Slight Beneficial	• Complement the character of the landscape • Enhance characteristic elements and features • Slightly enhance the sense of place • Result in a slight improvement to the view of a receptor of medium to high sensitivity; or, an obvious improvement to the view of a receptor of low sensitivity
Moderate Beneficial	• Slightly enhance the character of the landscape • Enable the restoration of characteristic elements and features completely lost or diminished as a result of changes from inappropriate management or development • Greatly enhance the sense of place • Result in a moderate improvement to the view of a receptor of medium to high sensitivity; or, a major improvement to the view of a receptor of low sensitivity
Substantial Beneficial	• Enhance the character of the landscape • Enable the restoration of characteristic elements and features completely lost or diminished as a result of changes from inappropriate management or development • Greatly enhance the sense of place • Result in a major improvement to the view of a receptor of high sensitivity
Very Substantial Beneficial	• Significantly enhance the character of the landscape • Enable the restoration of characteristic elements and features of a very high value landscape, completely lost or diminished as a result of changes from inappropriate management or development • Significantly enhance the sense of place • Result in a major improvement to the view of a receptor of very high sensitivity

3.8 Mitigation and Enhancement Measures

Mitigation measures are proposed to prevent, reduce and where possible offset, any adverse landscape and visual effects and are typically developed in collaboration with members of the design team and environmental specialists.

In terms of LVIA, the aims of mitigation are to ensure the proposed development achieves the best fit with the local landscape character, retains and makes best use of existing landscape features and provides adequate screening for visual receptors. The type(s) of mitigation measures proposed are influenced by the surrounding landscape character and where possible would address opportunities to enhance biodiversity and improve nature conservation.

Enhancement relates to any proposals that seek to improve the landscape and/or visual amenity of the proposed development site and its wider setting beyond its original baseline condition and as such is not specifically related to the mitigation of adverse effects. Enhancement is not a formal requirement but offers the opportunity to bring about positive benefits i.e. Improvement to land management; enhancement of habitats and other valued features; and the creation of new landscape, habitat and recreational areas.

Where a significant adverse landscape or visual effect cannot be avoided or markedly reduced, consideration can be given to any opportunity to offset, remedy or compensate. The aim, as far as possible, is to replace like with like, or where this is not possible, to provide features of equivalent value. For example a new area of woodland may eventually offset the loss of existing, highly valued mature woodland in visual and landscape character terms, but it is unlikely to compensate for the loss of established habitat or amenity value.

Such measures should normally be linked to the development in some way. It is increasingly common for offsetting measures to be offered that are not closely related to the lost or damaged features but may be sought by local communities or local authorities to offset unavoidable negative effects. They might include, for example, the provision of a new park or green space. Offsetting or compensation measures are usually regarded as a last resort.

Annex B - Landscape Strategy

Langstone FCERM

Landscape Strategy

Job Number: 60656877

June 2022

Quality Information

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Revision History

Revision	Revision date	Details	Authorized	Name	Position
01	01/06/2022	50% Stage Issue	DW	Don Ward	Senior Landscape Architect

Prepared for:
Havant Borough Council

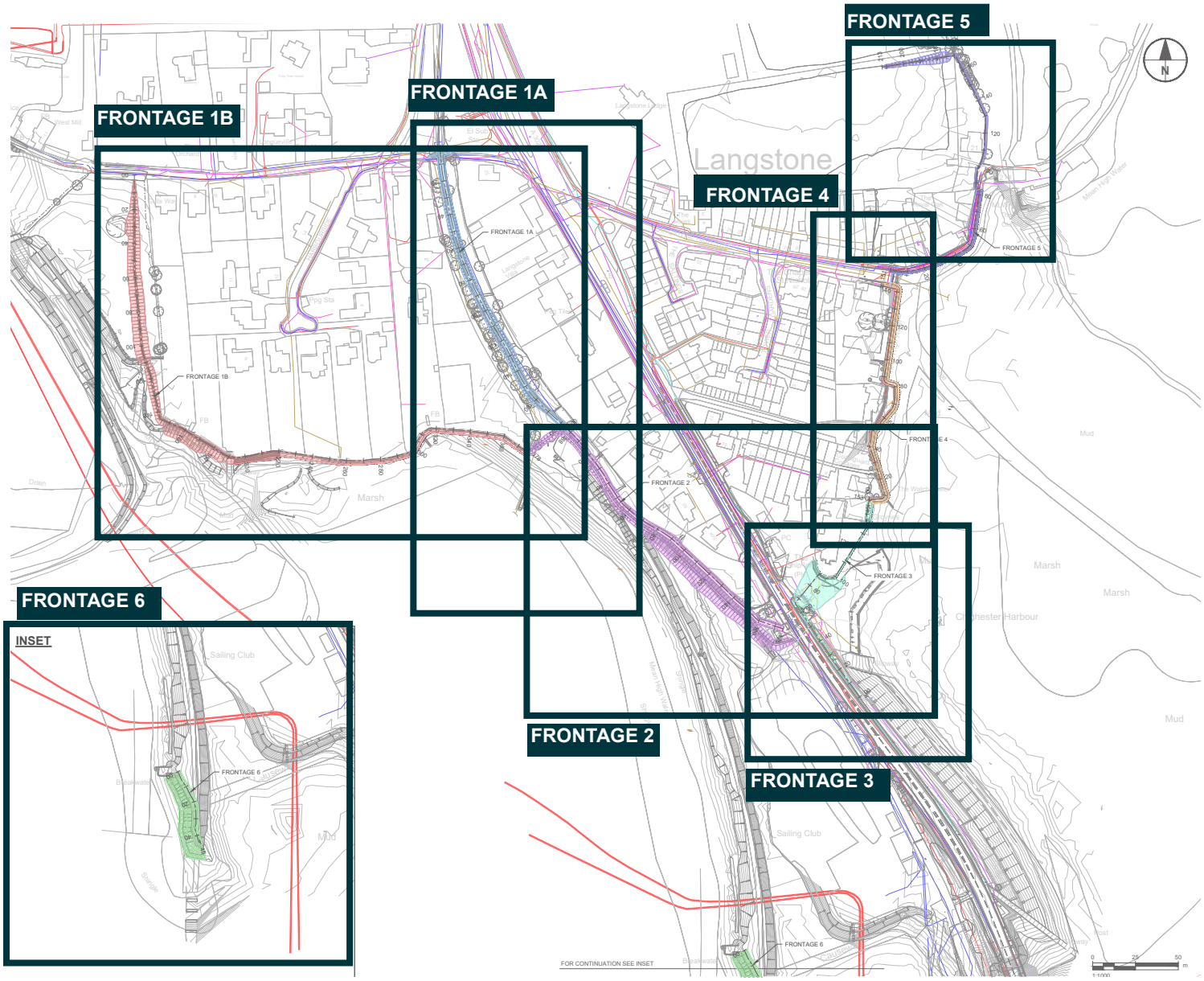
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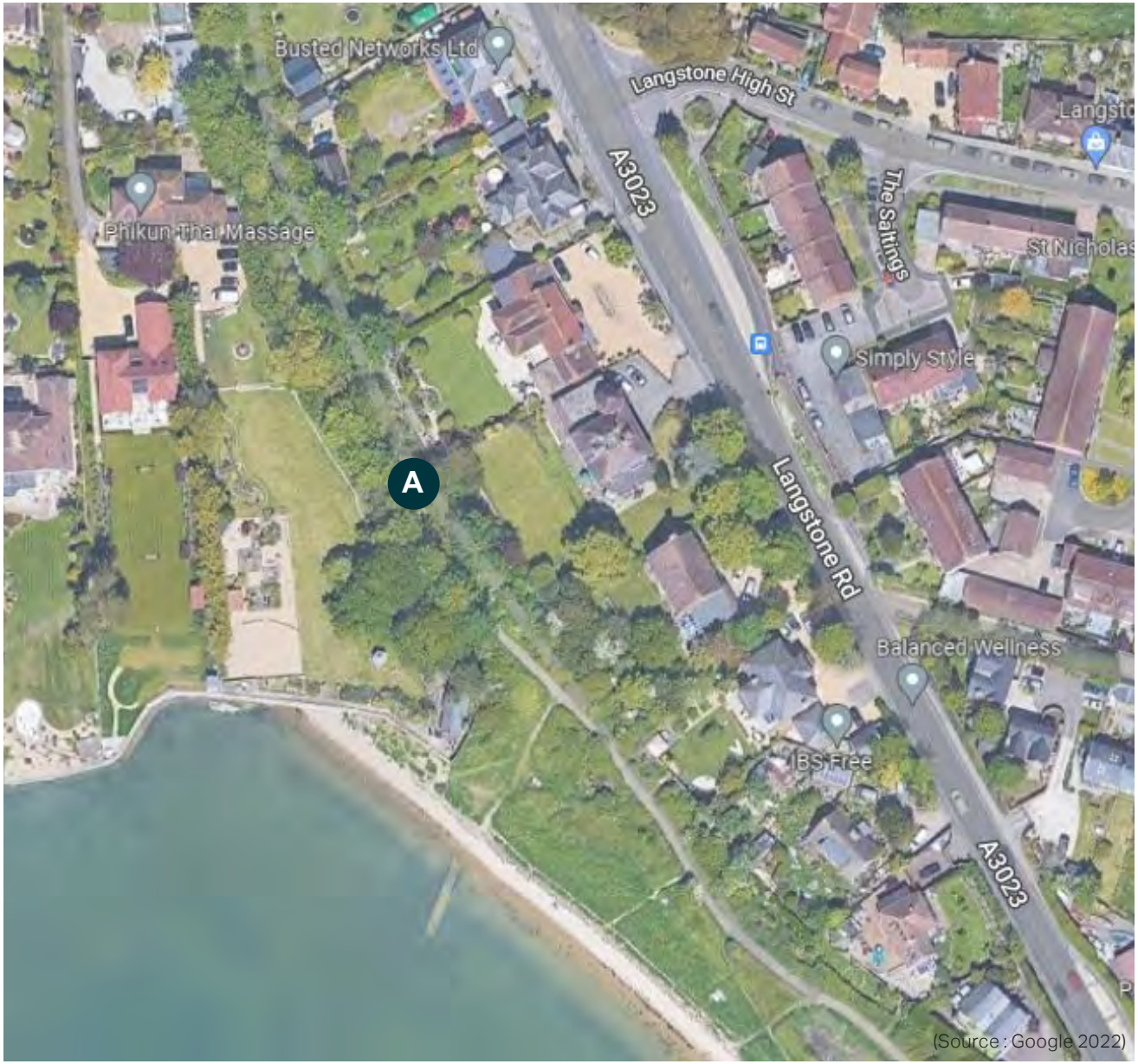
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Key Plan



Note: Frontages 1B & 6 do not form part of the proposal

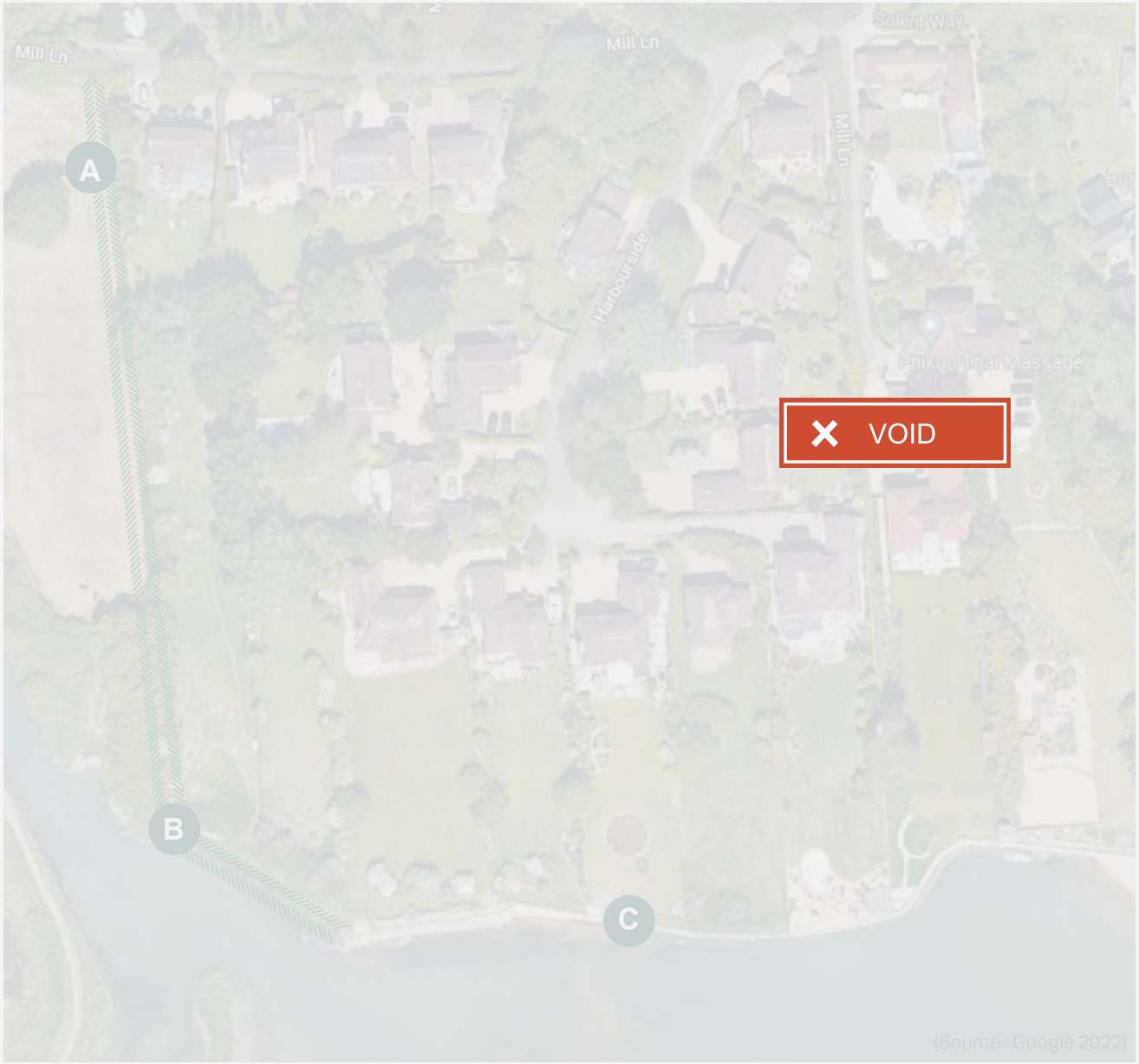
Landscape Opportunities & Constraints : Frontage 1A (Billy Lane)



A

- Proposed new embankment on the existing footpath.
- Reinstate footpath on top of the new embankment.
- Opportunities for native planting.
- Potential seating and wayfinding opportunities.
- Ecological measures such as Bee Posts to be included along the route.

Landscape Opportunities & Constraints : 1B (Capital Refurbishment)



A

- Option to include species rich wildflower seeding and native species hedge and trees.
- Recommendation is native planting of new bund to create valuable wildlife corridor, including species with berries for foraging animals and birds.

B

- Proposed new embankment.
- Existing vegetation clearance recommended.
- Opportunities for native planting.

C

- Recommendation for the refurbishment and enhancement of the wall.
- Opportunity to create a biodiversity corridor. (e.g. planting pockets within wall cladding)

Landscape Opportunities & Constraints : Frontage 2 (Billy Lane)



(Source : Google 2022)

A

- Proposed widening of shared cycleway/ pathway from 1.9 m to 3m to comply with highway standards.
- Recommendation for surface improvement.
- Ecological measures such as Bee Posts to be included along the route.

B

- Potential to enhance landscape, green space, footpaths, wayfinding signage and benches.

C

- Potential for widening of existing shared cycleway/pathway and surface improvement.
- Opportunity for wayfinding, interpretation boards and benches.
- Reinstatement areas along improved shared cycleway/pathway to include species rich wildflower seeding.
- Ecological measures such as Bee Posts to be included along the route.

- Potential wayfinding route to the open space highlighted in pink.

- Opportunity to add more seating and landscape improvements.

Landscape Opportunities & Constraints : Frontage 3 (Ship Inn)



- Proposed retaining wall and hand railings along the steps and ramp.
- New retaining wall to be brick cladded.
- New ramp, steps and handrails to be consistent with the overall landscape strategy.

- Potential for interpretation boards, seating, wayfinding.
- Opportunity to integrate seating as part of a flood defence wall

- Opportunity to include coastal planting.

A

- Potential resurfacing to existing car park and The Ship Inn to integrate with the new ramp.
- Potential bike rack/ cycle stands in the car park area.
- Potential for general landscaping improvements.

B

- Low dwarf wall to be brick cladded.

C

- Potential improvement to slipways.

D

- Improvement to existing access steps.

Landscape Opportunities & Constraints : Frontage 4



- **A** Proposed guardrails with chain access for kayaks and boats.
- **B** Potential to incorporate low level recessed lighting within the flint clad wall. Proposed lighting to be in accordance with the Dark Sky Policy.
- **C** Resurface existing pathway to match proposed pathway.
- **D** Historic Langstone Wadeway - opportunity for interpretation panel on land near here to explain history.

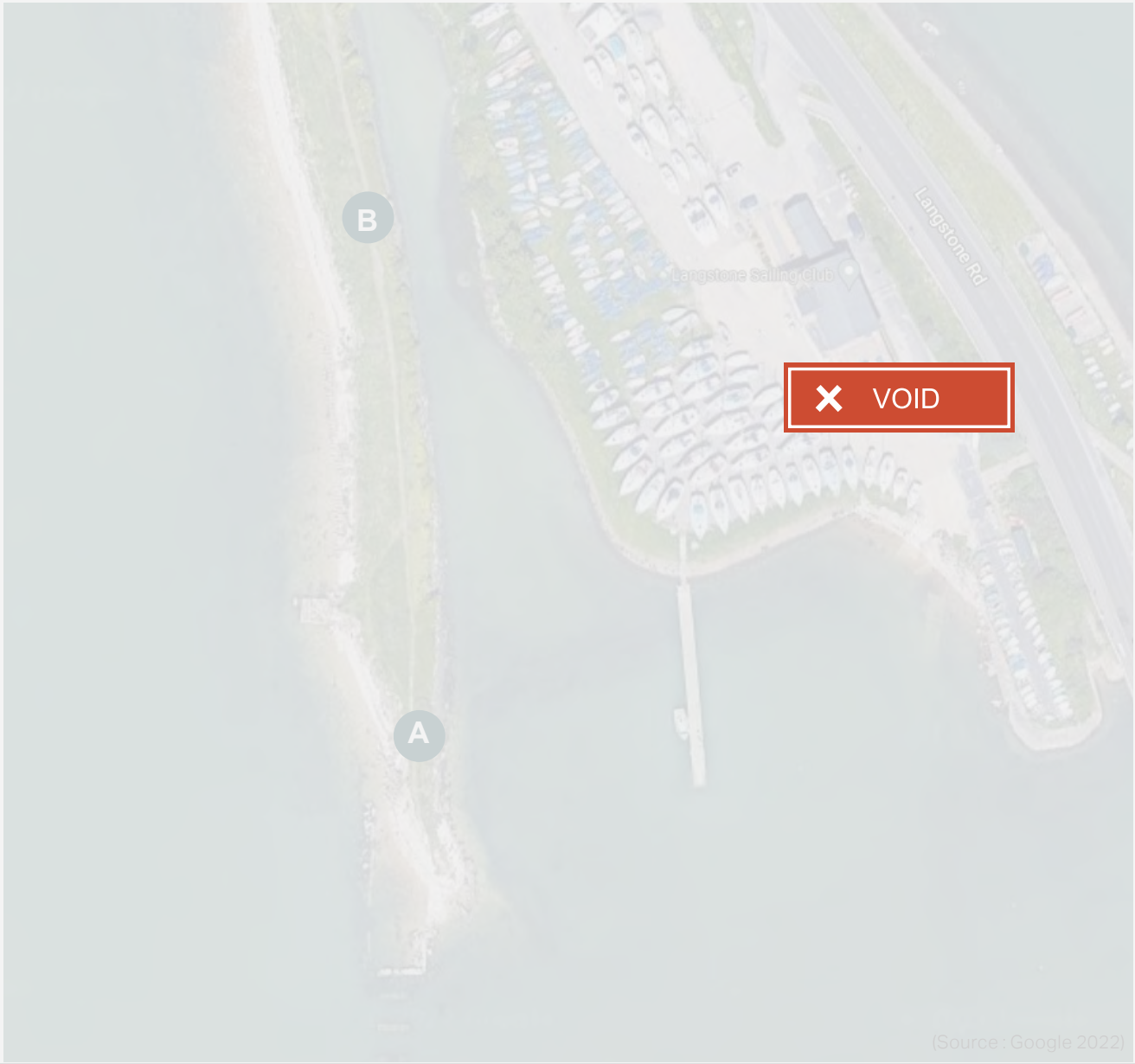
Landscape Opportunities & Constraints : Frontage 5



A
- Integrate seating and pathway resurfacing.

B
- New earth embankment and reinstatement areas grass seeded to agricultural use.

Landscape Opportunities & Constraints : Frontage 6



A • Retain existing landscape behind the proposed rock revetment. Opportunity for grass seeding to match existing.

B • Opportunity to add more seating along the existing footpath and wayfinding opportunities.

Wall Cladding



Brickwork Quay Wall in front of the Ship Inn



Brickwork wall founded on Stone Base in front of Watchtower Gardens



Brick quay wall in front of Winklemarket



Grade 2 Listed Brick Quay Wall in front of Green Cottage Grassed Area



Brick quay wall in front of the Watchtower gardens

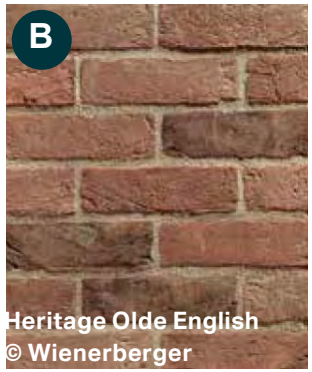


Setback brickwork wall in front of Watchtower



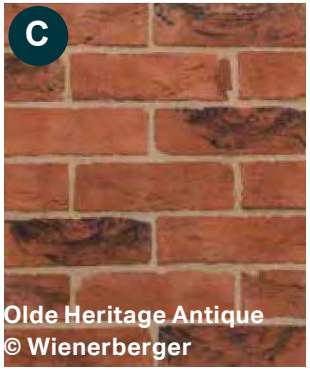
A

Heritage Blend
© Wienerberger



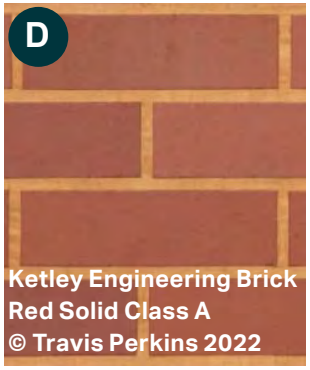
B

Heritage Olde English
© Wienerberger



C

Olde Heritage Antique
© Wienerberger



D

Ketley Engineering Brick
Red Solid Class A
© Travis Perkins 2022

Options to match existing brickwork

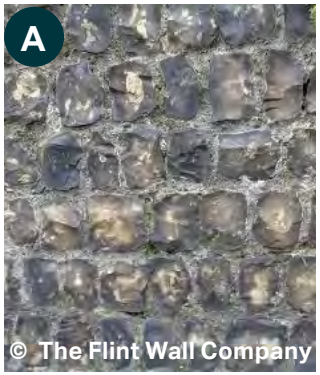
Wall Cladding

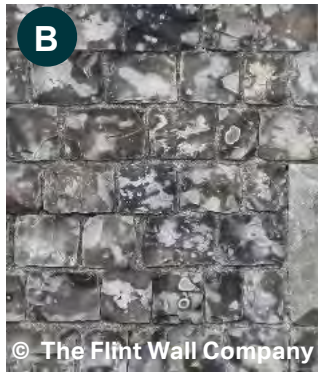


Flint Garden Wall in front of 25 Langstone High Street



Part Flint, part stone, part brick building wall on Seaward facing side of Winklemarket, 24 Langstone High Street



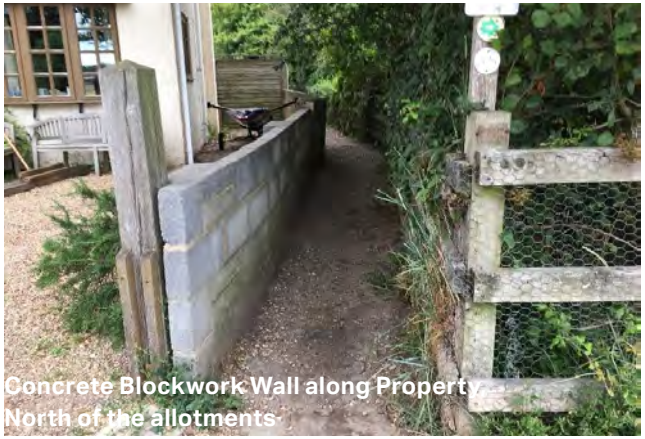




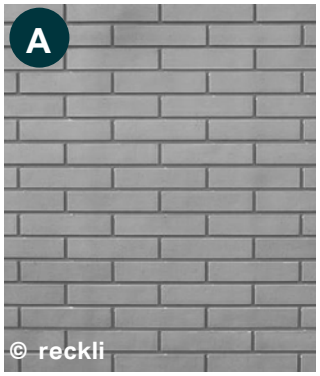


Options to match existing flintwork

Wall Cladding



Concrete Blockwork Wall along Property North of the allotments





Options to match existing concrete blockwork wall

Wall Treatments













Hollow concrete block





High Level Landscape Approaches - Coastal Planting















- Helictotrichon sempervirens (Blue Oat Grass)
- Purple Thyme
- Lavender
- Iris
- Sedum
- Juniper
- Pampas Grass
- Armeria maritima

• Opportunity to include coastal planting.

High Level Landscape Approaches - Wildflower Seedmix


© Exeter City Council


© Sutton Coldfield Town Council


© Natural England

High Level Landscape Approaches - Seating


© mmcite


© Bailey Streetscene 2022


© Furnitubes


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© mmcite



- Potential for interpretation boards, seating, wayfinding.

High Level Landscape Approaches - Seating along the pathway/cycleway









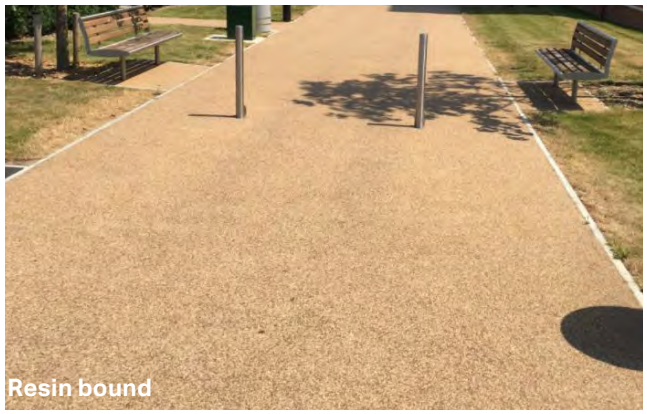




High Level Landscape Approaches - Pathway/Cycleway



Chiptex chipping rolled into black tarmacadam
© BituChem NatraTex



Resin bound





Hoggin footpath



© SureSet (www.sureset.co.uk)



Natural aggregate © SureSet (www.sureset.co.uk)

High Level Landscape Approaches - Ship Inn Car Park Surfacing




Concrete block pavers © Marshalls



Coloured paving © BituChem NatraTex




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Thermoplastic markings © Entire Surface Solutions Ltd. 2020

High Level Landscape Approaches - Cycle Stand

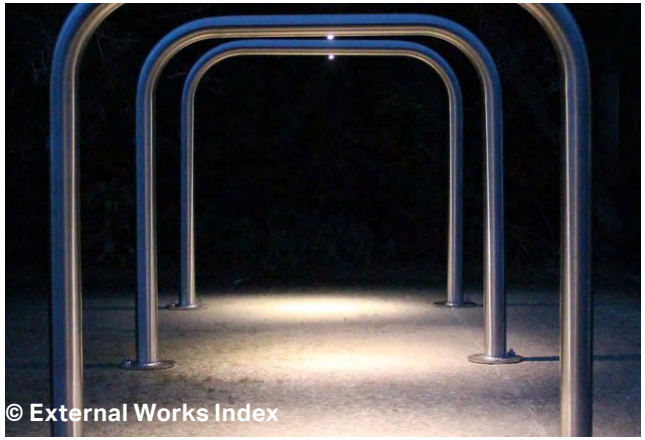












High Level Landscape Approaches - Street Furniture


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Annex C - Landscape Drawings

ISO A1 594mm x 841mm
Drawn: DW
Approved: JS
Checked: KC
Designer: DW
P01
Project Management Initials:
Revision:



TREES: FRONTAGE 1A
All standard tree to be double staked (as detail) and protected with a biodegradable tree guard (GreenTech Bio-earth tree shelter or equivalent).
All trees to have bark mulch (either chipped if suitable from arisings of clearance or locally sourced bark chip mulch) to 75mm depth.

CODE	Latin name	Common name	Form	Age / Condition	Girth	Height	Clear stem	Roots	Container	No.
AC	*Acer campestre*	Field Maple	Standard (Extra Heavy)	3x	16-18	400-450	min 200	RB	60cm	5
AP	*Acer pseudoplatanus*	Sycamore	Standard (Extra Heavy)	3x	16-18	450-625	min 200	RB		4
CA	*Corylus avellana*	Hazel	Feathered	2x		125-150		B		3
CM	*Crataegus monogyna*	Hawthorn	Feathered	2x		125-150		B		2
PO	*Populus × canescens*	Grey poplar	Standard	3x	16-18	min 450	min 200	RB		2
PT	*Populus tremula*	Aspen	Standard (Extra Heavy)	3x	16-18	400-450	min 200	RB	60cm	3
PA	*Prunus avium*	Wild Cherry	Standard (Extra Heavy)	3x	16-18	400-450	min 200	RB	60cm	2
PC	*Prunus cerasifera*	Cherry Plum	Standard	3x	16-18	min 450	min 200	RB		2
PP	*Prunus padus*	Bird Cherry	Standard	3x	16-18	min 450	min 200	RB		2
PS	*Prunus spinosa*	Blackthorn	Feathered	2x		125-150		B		3
QR	*Quercus robur*	Common Oak	Standard (Extra Heavy)	3x	16-18	400-450	min 200	RB	60cm	7

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AECOM

PROJECT

Langstone Flood and Coastal Erosion Risk Management Scheme

CLIENT

HAVANT BOROUGH COUNCIL

CONSULTANT

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7. ALSO REFER TO DRAWINGS:
FRONTAGE 1A DRAWINGS - ##1101 TO ##1103
SITE CLEARANCE PLAN - #011030

DRAWING SPECIFIC NOTES:
8. TREE LOCATIONS SUBJECT TO SITE CONDITIONS AND TO BE AGREED ON SITE.

LEGEND

- MIX 1 - HEDGEROW SEED MIX
- MIX 2 - STANDARD GENERAL PURPOSE MEADOW MIX
- MIXED NATIVE SPECIES PLANTING
- PROPOSED TREES
- EXISTING TREES RETAINED
- EXISTING VEGETATION RETAINED WHERE POSSIBLE
- MACADAM SURFACING (to engineers details)
- PROPOSED TIPTREE BENCH SEATING WITH MACADAM SURROUND and PCC EDGING
- WESTLEIGH TIMBER SLATTED LITTER BIN
- INTERPRETATION BOARD LOCATION DETAILS TBC
- BAT BOX LOCATIONS: 3 No. TYPE SCHWEGLER 2F; 3-4M MINIMUM OFF THE GROUND: SOUTH, EAST, WEST ORIENTATION

ISSUE/REVISION

P01	21/11/23	100% Detailed Design
I/R	DATE	DESCRIPTION

ISSUE PURPOSE / SUITABILITY

Suitable for Review & Authorization

KEY PLAN

PROJECT NUMBER

60656877

SHEET TITLE

FRONTAGE 1A
LANDSCAPE LAYOUT

SHEET NUMBER

LANG-ACM-LS-F1A-DR-LA-011020

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Project Management Initials:
Designer: DW
Revision: C02
Checked: CP
Approved: JScott
Drawn: DW



TREES: FRONTAGE 2
All standard tree to be double staked (as detail) and protected with a biodegradable tree guard (GreenTech Bio-earth tree shelter or equivalent).
All trees to have bark mulch (either chipped if suitable from arisings of clearance or locally sourced bark chip mulch) to 75mm depth.

CODE	Latin name	Common name	Form	Age / Condition	Girth	Height	Clear stem	Roots	Container	No.
AC	*Acer campestre*	Field Maple	Standard (Extra Heavy)	3x	16-18	400-450	min 200	RB	60cm	2
CA	*Corylus avellana*	Hazel	Feathered	2x		125-150		B		7
CM	*Crataegus monogyna*	Hawthorn	Feathered	2x		125-150		B		1
MD	*Malus domestica*	Apple	Standard (Extra Heavy)	3x	16-18	400-450	min 200	RB	60cm	2
MS	*Malus sylvestris*	Crab Apple	Standard (Extra Heavy)	3x	16-18	400-450	min 200	RB	60cm	3
PO	*Populus × canescens*	Grey poplar	Standard	3x	16-18	min 450	min 200	RB		1
PT	*Populus tremula*	Aspen	Standard (Extra Heavy)	3x	16-18	400-450	min 200	RB	60cm	1
PA	*Prunus avium*	Wild Cherry	Standard (Extra Heavy)	3x	16-18	400-450	min 200	RB	60cm	1
PP	*Prunus padus*	Bird Cherry	Standard	3x	16-18	min 450	min 200	RB		1
PS	*Prunus spinosa*	Blackthorn	Feathered	2x		125-150		B		2
QR	*Quercus robur*	Common Oak	Standard (Extra Heavy)	3x	16-18	400-450	min 200	RB	60cm	4

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AECOM

PROJECT

Langstone Flood and Coastal Erosion Risk Management Scheme

CLIENT

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7. ALSO REFER TO DRAWINGS:
FRONTAGE 1A DRAWINGS - ##1201 TO ##1206
SITE CLEARANCE PLAN - #011031

DRAWING SPECIFIC NOTES:
8. TREE LOCATIONS SUBJECT TO SITE CONDITIONS AND TO BE AGREED ON SITE.

LEGEND

- MIX 1 - HEDGEROW SEED MIX
- MIX 2 - DIVERSE MEADOW MIX
- MIX 3 - COASTAL MEADOW SEED MIX
- MIXED NATIVE SPECIES PLANTING
- PROPOSED TREES
- EXISTING TREES RETAINED
- EXISTING VEGETATION RETAINED WHERE POSSIBLE
- MACADAM SURFACING (to engineers details)
- PROPOSED TIPTREE BENCH SEATING WITH MACADAM SURROUND and PCC EDGING
- BEE POST
- IB INTERPRETATION BOARD LOCATION DETAILS TBC
- MIXED NATIVE INSTANT HEDGE

ISSUE/REVISION

P01	21/11/23	100% Detailed Design
P02	08/02/24	
P03	26/02/24	100% Detailed Design
C01	26/02/24	Construction Issue
P04	03/02/25	FOR PLANNING
C02	03/02/25	FOR PLANNING
I/R	DATE	DESCRIPTION

ISSUE PURPOSE / SUITABILITY

Detail Design Authorised/Accepted

KEY PLAN

PROJECT NUMBER

60656877

SHEET TITLE

FRONTAGE 2
LANDSCAPE LAYOUT

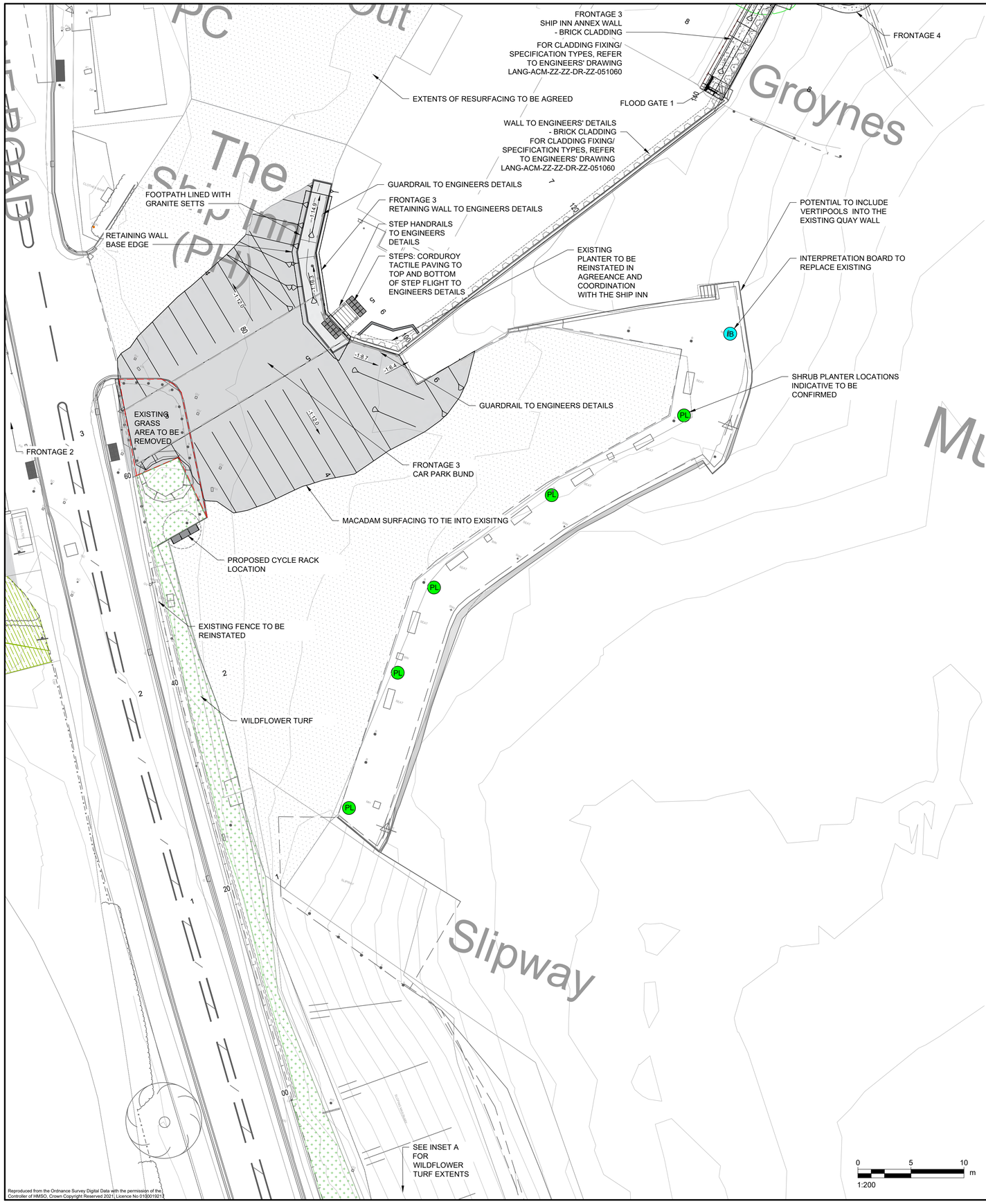
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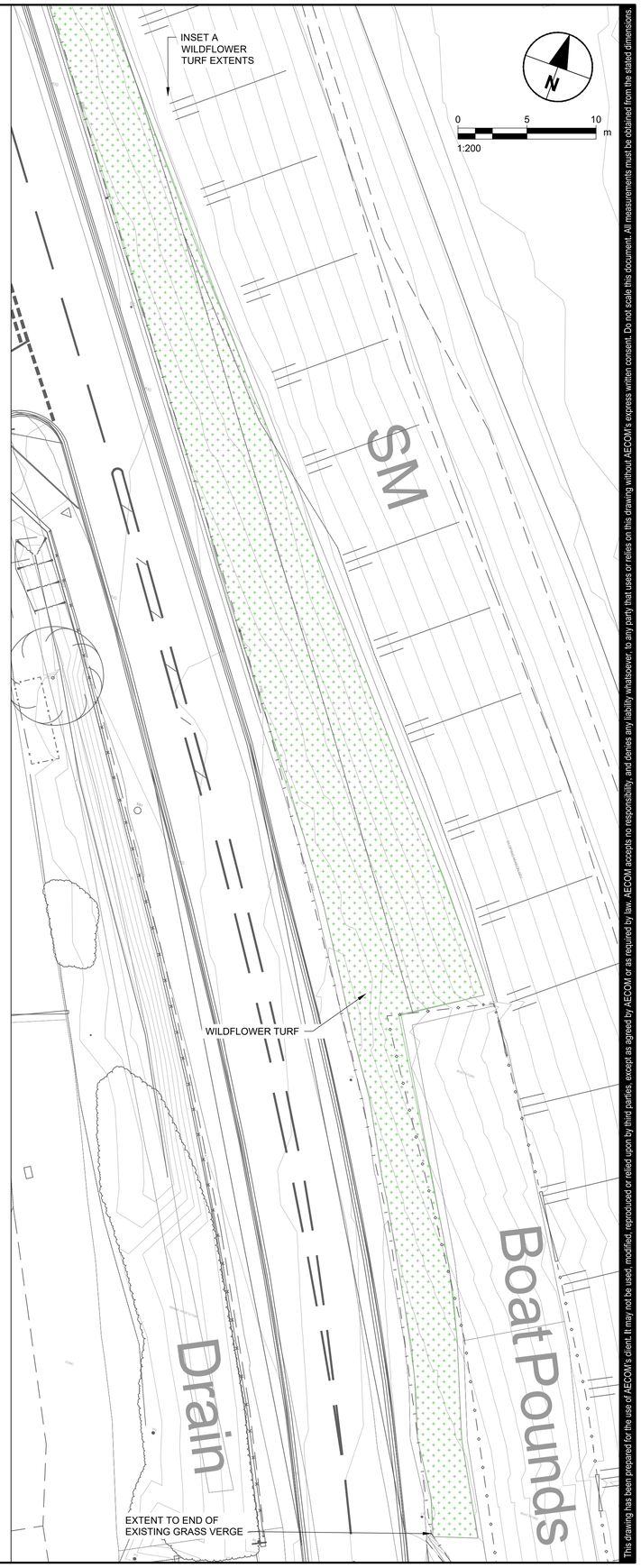
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Approved: JS
Checked: KC
Designer: DW
P01
Project Management Initials:
Revision:



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Langstone Flood and Coastal Erosion Risk Management Scheme

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7. ALSO REFER TO DRAWINGS:
FRONTAGE 1A DRAWINGS - ##1301 TO ##1306
SITE CLEARANCE PLAN - #011032

DRAWING SPECIFIC NOTES:
8. TREE LOCATIONS SUBJECT TO SITE CONDITIONS AND TO BE AGREED ON SITE.

LEGEND

- WILDFLOWER TURF
- MACADAM SURFACING (to engineers details)
- GRANITE SETTS AS DEMARCATION TO PATHWAY OF THE 'THE SHIP INN' CAR PARK (to engineers details)
- 4 NO. STAINLESS STEEL CYCLE STANDS
- OPPORTUNITY TO RESURFACE MACADAM CAR PARK (subject to agreement and funding TBC)
- IB — INTERPRETATION BOARD LOCATION DETAILS TBC
- PL — SHRUB PLANTER DETAILS TBC

ISSUE/REVISION

P01	21/11/23	100% Detailed Design
I/R	DATE	DESCRIPTION

ISSUE PURPOSE / SUITABILITY

Suitable for Review & Authorization

KEY PLAN

PROJECT NUMBER

60656877

SHEET TITLE

FRONTAGE 3
LANDSCAPE LAYOUT

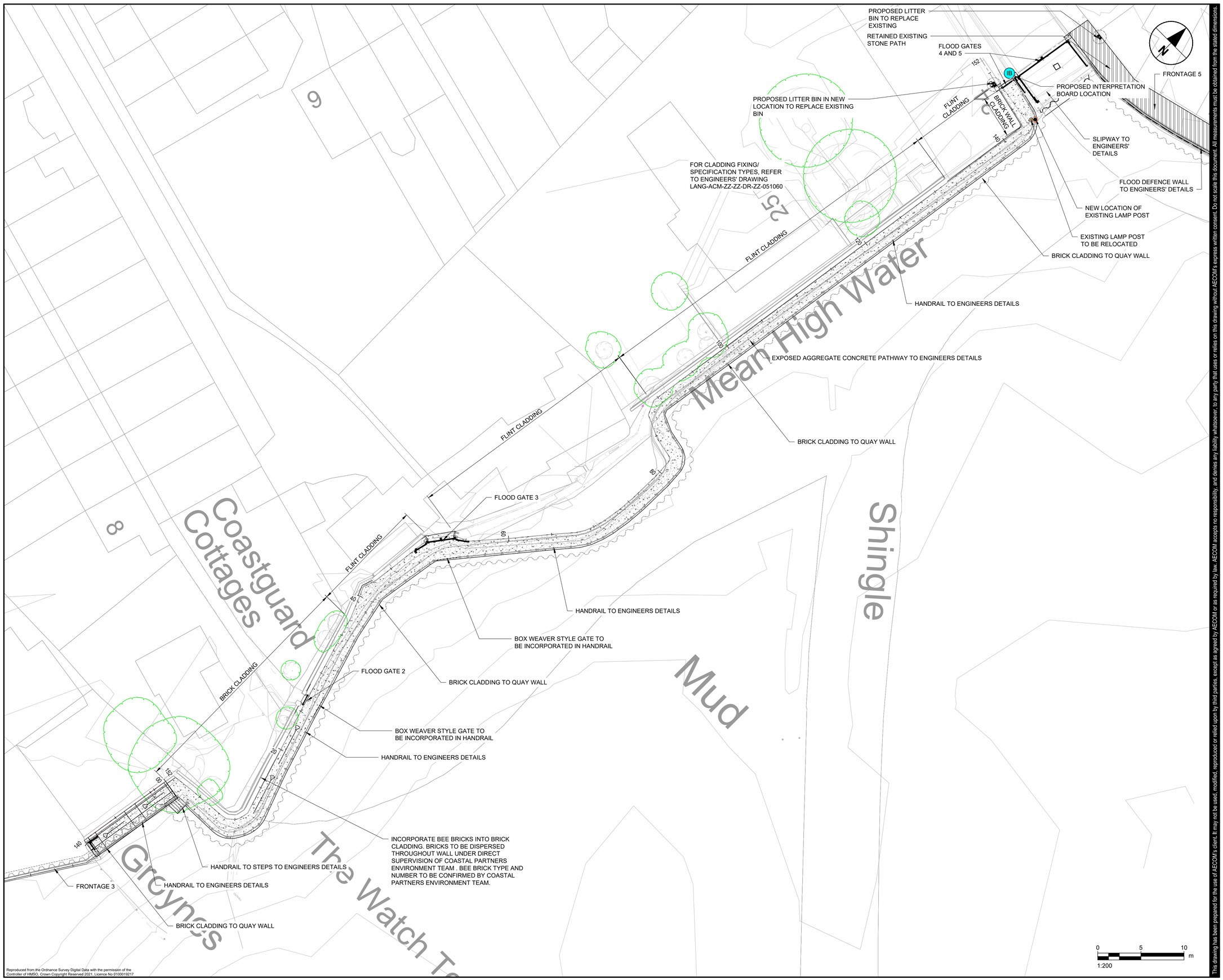
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Designer: DW
Checked: CP
Approved: JScott
Drawn: DW
Revision: C02



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AECOM

PROJECT

Langstone Flood and Coastal Erosion Risk Management Scheme

CLIENT

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7. ALSO REFER TO DRAWINGS:
FRONTAGE 1A DRAWINGS - ##1401 TO ##1412
SITE CLEARANCE PLAN - #011033

DRAWING SPECIFIC NOTES:
8. TREE LOCATIONS SUBJECT TO SITE CONDITIONS AND TO BE AGREED ON SITE.

LEGEND

- EXPOSED AGGREGATE CONCRETE (to engineers details)
- WESTLEIGH TIMBER SLATTED LITTER BIN
- EXISTING TREES RETAINED
- INTERPRETATION BOARD LOCATION DETAILS TBC
- RETAINED EXISTING STONE PATH (FRONTAGE 5)

ISSUE/REVISION

P01	21/11/23	100% Detailed Design
P02	08/02/24	100% Detailed Design
C01	08/02/24	Construction Issue
P03	30/01/25	Green Cottage Update
C02	30/01/25	Green Cottage Update
I/R	DATE	DESCRIPTION

ISSUE PURPOSE / SUITABILITY

Detail Design Authorised/Accepted

KEY PLAN

PROJECT NUMBER

60656877

SHEET TITLE

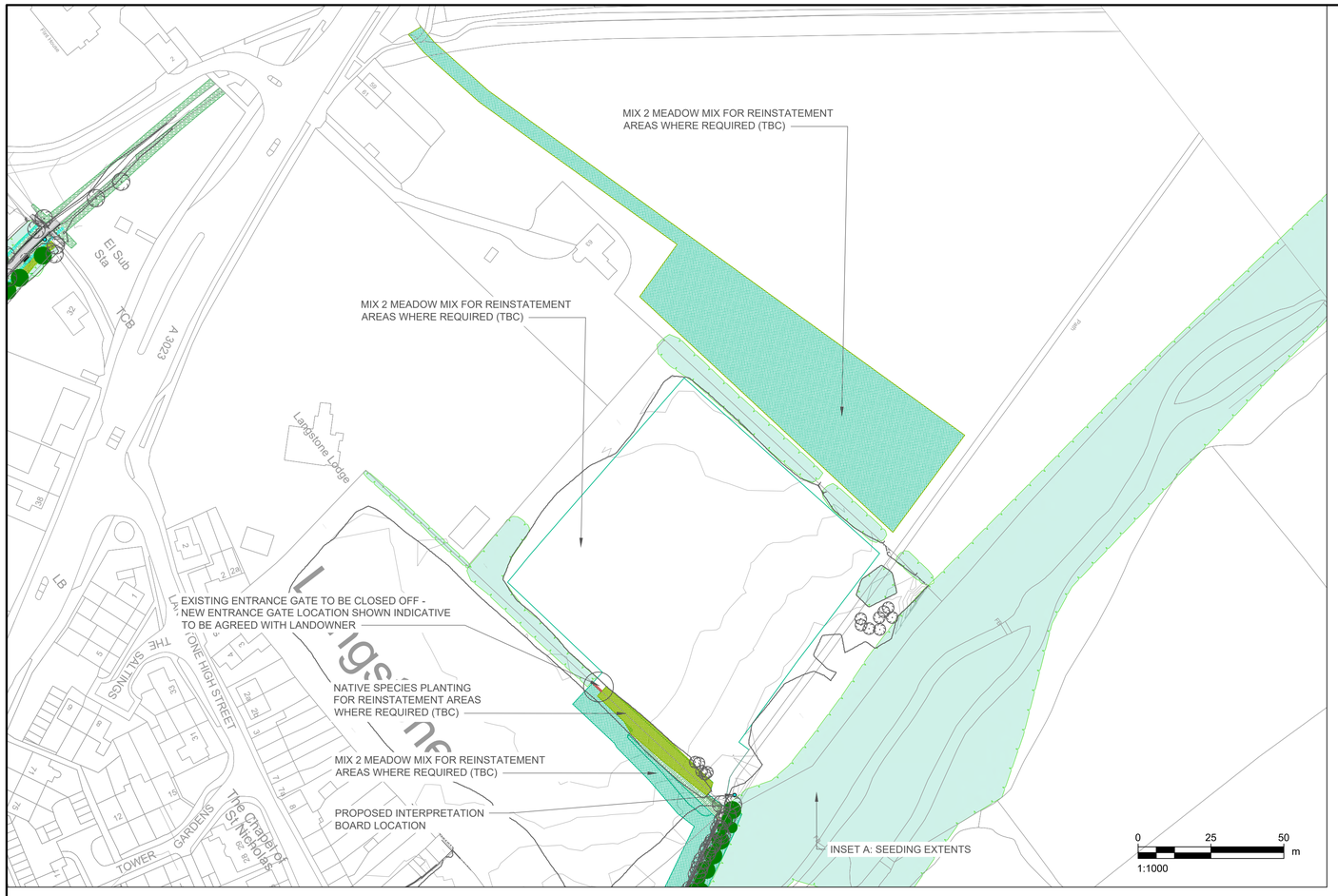
FRONTAGE 4
LANDSCAPE LAYOUT

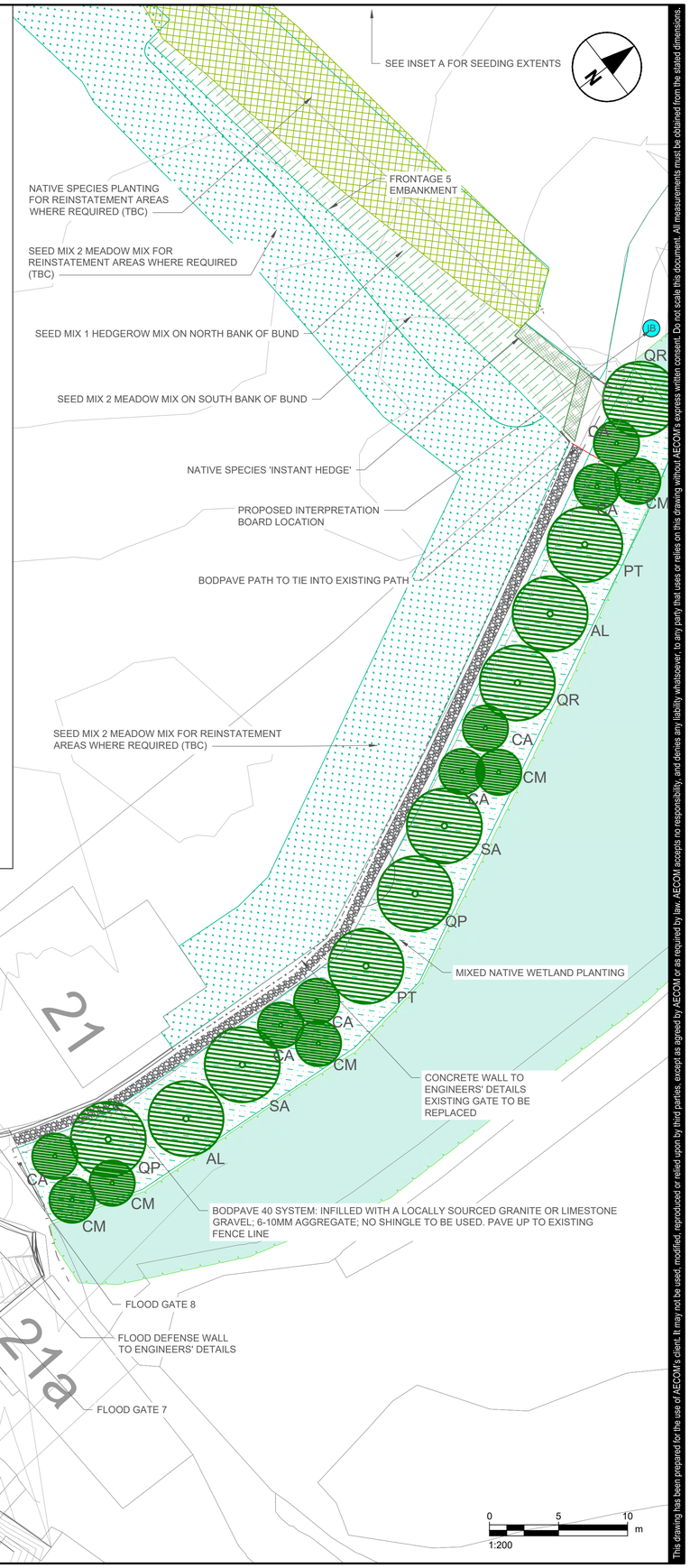
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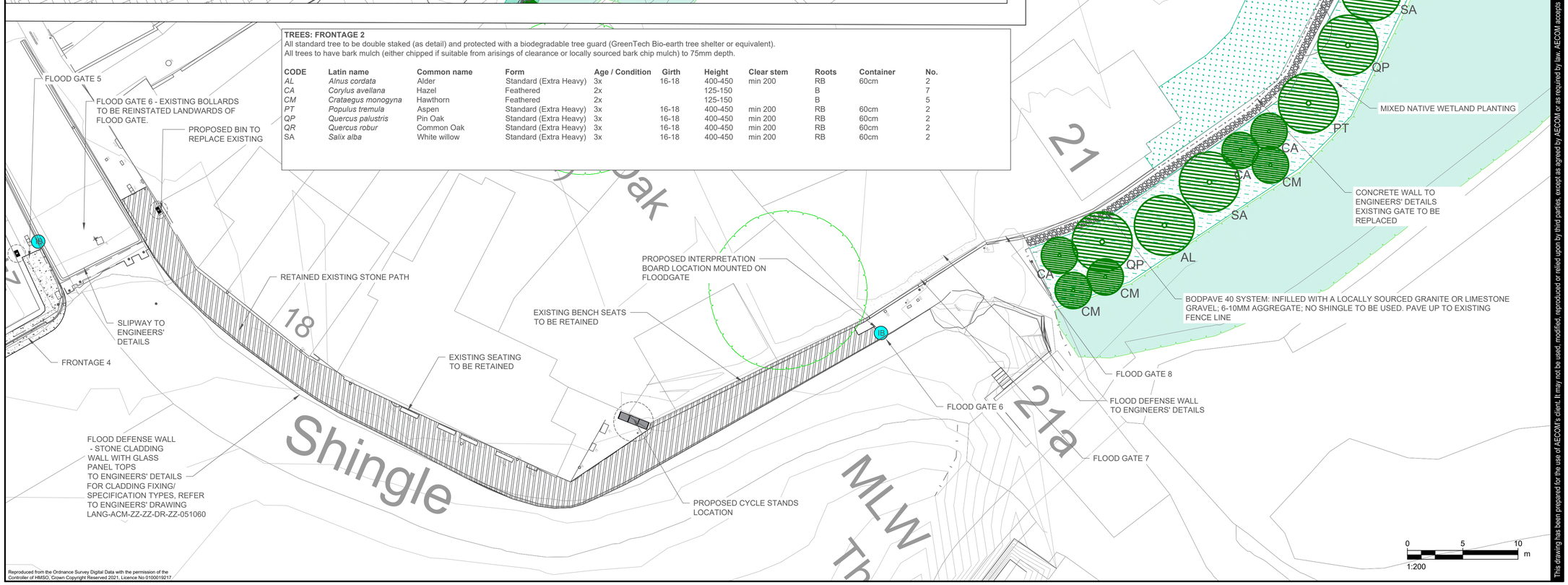
ISO A1 594mm x 841mm
Project Management Initials:
Revision: P01
Designer: DW
Checked: KC
Approved: JS
Drawn: DW





TREES: FRONTAGE 2
All standard tree to be double staked (as detail) and protected with a biodegradable tree guard (GreenTech Bio-earth tree shelter or equivalent).
All trees to have bark mulch (either chipped if suitable from arisings of clearance or locally sourced bark chip mulch) to 75mm depth.

CODE	Latin name	Common name	Form	Age / Condition	Girth	Height	Clear stem	Roots	Container	No.
AL	*Alnus cordata*	Alder	Standard (Extra Heavy)	3x	16-18	400-450	min 200	RB	60cm	2
CA	*Corylus avellana*	Hazel	Feathered	2x		125-150		B		7
CM	*Crataegus monogyna*	Hawthorn	Feathered	2x		125-150		B		5
PT	*Populus tremula*	Aspen	Standard (Extra Heavy)	3x	16-18	400-450	min 200	RB	60cm	2
QP	*Quercus palustris*	Pin Oak	Standard (Extra Heavy)	3x	16-18	400-450	min 200	RB	60cm	2
QR	*Quercus robur*	Common Oak	Standard (Extra Heavy)	3x	16-18	400-450	min 200	RB	60cm	2
SA	*Salix alba*	White willow	Standard (Extra Heavy)	3x	16-18	400-450	min 200	RB	60cm	2



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AECOM

PROJECT

Langstone Flood and Coastal Erosion Risk Management Scheme

CLIENT

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7. ALSO REFER TO DRAWINGS:
FRONTAGE 1A DRAWINGS - ##1501 TO ##1506
SITE CLEARANCE PLAN - #011034

DRAWING SPECIFIC NOTES:
8. TREE LOCATIONS SUBJECT TO SITE CONDITIONS AND TO BE AGREED ON SITE.

LEGEND

- MIX 1 - HEDGEROW SEED MIX
- MIX 2 - DIVERSE MEADOW MIX
- MIX NATIVE WETLAND PLANTING
- MIXED NATIVE INSTANT HEDGE
- PROPOSED TREES
- EXISTING TREES RETAINED
- BODPAVE 40 SYSTEM TO BE INFILLED WITH A LOCALLY SOURCED GRANITE OR LIMESTONE GRAVEL; 6-10MM AGGREGATE;NO PEA SHINGLE TO BE USED
- INTERPRETATION BOARD LOCATION DETAILS TBC

ISSUE/REVISION

P01	21/11/23	100% Detailed Design
I/R	DATE	DESCRIPTION

ISSUE PURPOSE / SUITABILITY

Suitable for Review & Authorization

KEY PLAN

PROJECT NUMBER

60656877

SHEET TITLE

FRONTAGE 5
LANDSCAPE LAYOUT

SHEET NUMBER

LANG-ACM-LS-F5-DR-LA-011024

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Annex D- Langstone Conservation Area Appraisal and Management Plan and Mill Lane Conservation Area Appraisal and Management Plan

HAVANT BOROUGH COUNCIL

LANGSTONE CONSERVATION AREA REVIEW

CHARACTER APPRAISAL AND MANAGEMENT PLAN

PART 1 – CHARACTER APPRAISAL
PART 2 – MANAGEMENT PLAN

APPROVED JULY 2011

Langstone Conservation Area Review - Character Appraisal and Management Plan

CONTENTS

Part 1 - The Character Appraisal

1.0 Introduction to Conservation Areas
- 1.1 Definition of a Conservation Area
- 1.2 Planning Policy Context
  - 1.2.1 National Policy
  - 1.2.2 Local Planning Policy
  - 1.2.3 Conservation Area Character Appraisals
  - 1.2.4 Management Proposals
- 1.3 Langstone Conservation Area

2.0 Location and Context
- 2.1 Location and Setting
- 2.2 National Significance

3.0 Historical Development of Langstone Conservation Area
- 3.1 The Development of Langstone

4.0 Area Definition – Entrances and Boundaries
- 4.1 Entrances
  - 4.1.1 Entrance into Langstone High Street
  - 4.1.2 Entrance into Ship Inn Car Park
  - 4.1.3 Pedestrian entrance from the east via Wayfarers Walk
- 4.2 Boundaries
  - 4.2.1 Boundary with Langstone Road
  - 4.2.2 East and North Boundaries

5.0 Spatial Analysis
- 5.1 Development Pattern
- 5.2 Use & Activity
- 5.3 Open Spaces
- 5.4 Views & Vistas
- 5.5 Building Types, Important Walls and Boundary Features.
- 5.6 Listed Buildings
- 5.7 Locally Listed Buildings
- 5.8 Positive Buildings
- 5.9 Building Styles, Materials and Local Details.
- 5.10 Public Realm (Roads, Pavements & Street Furniture)

Part 2 – The Management Plan

1.0 Format of the Management Plan

2.0 Issues
- 2.1 The Control of New Development
  - 2.1.1 Article 4 (1) Directions
  - 2.1.2 Design Guidance
- 2.2 Opportunities for Enhancement and Improvement
  - 2.2.1 Open space to the south of the Ship Inn
  - 2.2.2 Improvements to the public realm
  - 2.2.3 Additions to the List of Buildings of Local Interest

3.0 Recommendations

Langstone Conservation Area Review - Character Appraisal and Management Plan

1.0 Introduction to Conservation Areas

1.1 Definition of a Conservation Area

Conservation areas are defined as:

'Areas of special architectural or historic interest, the character of which it is desirable to preserve or enhance'[1].

Such areas can be rural, urban or mixed but all have a special character. Once designated the local planning authority has a duty to pay special attention to the desirability of preserving or enhancing the character or appearance of the area, in the exercise of its planning functions.[2] Over 9000 conservation areas have now been designated in the UK. The responsibility for the designation of such areas and their protection lies primarily with the local planning authority.

1.2 Planning Policy Context

1.2.1 National Planning Policy

The concept of conservation areas arose from the 1967 Civic Amenities Act and is now contained in the Planning (Listed Buildings and Conservation Areas) Act 1990 (P(LBCA)Act 1990). Section 71 of this Act requires local planning authorities to formulate and publish proposals for the future preservation and enhancement of their conservation areas and for this to be reviewed from time to time. As part of the conservation area designation, local authorities are required to produce a character appraisal. For existing conservation areas, the provision of up to date character appraisals are advised as a matter of best practice. A clear, comprehensive appraisal of the character of a conservation area, provides a sound basis for development management, guiding action and for developing initiatives to improve the area if required.

National planning policy guidance is contained within Planning Policy Statement 5 (March 2010) – Planning and the Historic Environment and the associated Practice Guide provides the national policy framework.

1.2.2 Local Planning Policy

Local planning policies are set out in the Havant Borough District Wide Local Plan 1996 – 2011. This is in the process of being replaced by the Local Development Framework (LDF). The LDF Core Strategy came into force on 1 March 2011. Until completion of the full range of documents comprising the LDF, local planning policy will comprise the Core Strategy and saved policies from the Local Plan. Conservation area documents, such as this Appraisal will form part of the LDF.

1.2.3 Conservation Area Character Appraisals

English Heritage has produced advice on conservation areas, in particular, 'Guidance on Conservation Area Appraisals' (2005) and 'Guidance on the Management of Conservation Areas' (2005), which have been used as a model in the preparation of this Appraisal.

The key features of a character appraisal are to:-

[1] P(LBCA)Act1990
[2] P(LBCA)Act1990

- Identify the significant features which contribute towards a conservation area's character.

- Provide a clear historical and visual assessment of the place and generate awareness of the area's significance to key stakeholders.

- Provide residents with a clear understanding of what is important about the conservation area.

- Provide the Council with valuable information which can guide and inform planning related decisions in that area.

1.2.4 Management Proposals

An important outcome of character appraisals will be to inform appropriate management proposals for the area, which English Heritage advise should be set out in a specific document called a Management Plan. The objective of a Management Plan is to identify actions for the preservation or enhancement of the particular conservation area, such as proposals to address buildings at risk, environmental enhancement etc.

1.3 Langstone Conservation Area

Langstone Conservation Area was first designated in 1975. It has subsequently been reviewed in 1985, with an expansion to the originally agreed boundary. It was last revised in 1993. This Appraisal builds on this earlier work to provide a more comprehensive and up to date assessment of the area.

2.0 Location and Context

2.1 Location and Setting

Langstone lies approximately three quarters of a mile to the south of Havant town centre and the A27 bypass which leads to Chichester. It is situated between the main road (A3023) to Hayling Island and the coast on a low lying plain, at the confluence of Langstone and Chichester Harbours. Langstone Bridge (leading to Hayling Island) lies immediately to the south of the conservation area. The conservation area encapsulates what was the historical hamlet of Langstone that evolved around the harbour. It abuts Wade Court conservation area to the north and lies adjacent to Mill Lane Conservation Area to the west. Part of the Langstone Conservation Area includes a popular coastal path, known as Wayfarers Walk.

Langstone Conservation Area straddles two types of topography including the low lying shoreline to the east and south and the flat green fields which lie to the north and west. The conservation area therefore is generally flat with the waterfront development being positioned on raised stone quays. As a result of its proximity to the harbour, the conservation area is situated within Flood Zones 2 and 3, identified by the Environment Agency, which means that the area is more susceptible to a risk of flooding.

2.2 National Significance

The unique coastal setting, wetlands and harbour, part of which lies within the conservation area, have national and international significance for their environmental and nature conservation interest. This is recognised through a number of designations, including the Chichester Harbour Area of Outstanding Natural Beauty (AONB),

International Wetlands (RAMSAR convention), a Site of Specific Scientific Interest (SSSI), a Special Area of Conservation (SAC) and a Site of Importance for Nature Conservation (SINC).

3.0 Historical Development of Langstone Conservation Area

3.1 The Development of Langstone

Langstone has a long history of human occupation which is largely a result of its coastal location and ensuing commercial operations. To the north of the existing village (outside the conservation area) in the vicinity of Langstone Avenue, are the remains of a Roman Villa.

By Medieval times, Langstone was the acknowledged port of Havant and continued to operate as a commercial port (importing wood, coal and locally dredged sand and gravel and exporting grain). It is said that vessels of from three to four hundred tons could discharge their cargoes at the quay on either side of the causeway leading from the bridge. Further to this, the geographical position of Langstone has in the past, made it a popular haunt for smugglers. Symbols of this commercial period are still evident today in the form of the 18th C former corn windmill which sits on the eastern harbour frontage, a malt house (now the Ship PH), as well as the other commercial and domestic buildings and raised quays along the eastern frontage.

Prior to a bridge to Hayling Island being built, the only way across the water was by boat or by an ancient wadeway which is visible when the tide is out. In 1817, Butler states that "the hamlet of Langstone stands at the entrance to the ford or wadeway and contains three mills, twelve houses and a public house". In 1824, the first road bridge to the island was constructed, as well as the section of Langstone Road from Langstone High Street southwards. This new link effectively by-passed the village which was therefore spared the consequences of increasing traffic volumes and development pressures and has remained largely unchanged.

The mid 19th C was a particularly progressive time for Langstone. As a result of the shipping and water activity in Chichester Harbour, the Admiralty built a coastguard station in 1860. This included a watch tower and a row of coastguard cottages as well as the Chief Officer's house. The ongoing commercial activity also led to a railway line (located just to the west of the conservation area) from Langstone to Havant. This was opened in 1865 in order to transport goods brought in by ships northwards to Havant and then onto London. In 1867, the train line was made available to passengers and was extended to South Hayling, which required the construction of a new railway bridge over the water. This railway was known locally as the 'Hayling Billy'. The former Station Master's house still stands at the north-west corner of the conservation area boundary and is listed for its special architectural/historic interest.

The later part of the 19th Century saw incremental development occurring westward along Langstone High Street, with a few larger detached houses e.g. Langstone Lodge and Flint House being constructed at the periphery of the village, along with the Station Master's house. The decline of the coastal trade at Langstone during the 20th Century coupled with the cost of replacing the eroded bridge across Langstone Harbour led to the closure of the railway line in 1962. The section from Langstone to Havant is now used as a combined footpath, cycleway and bridle path.

The early part of the 20th Century saw a small number of detached and semi-detached villas being constructed in Langstone High Street. Most were associated with Langstone Lodge. The flint boundary walls date from this period. In the 1960's and 1970s, two

developments, Tower Gardens and The Saltings, were constructed to the south of Langstone High Street. These developments were designed as small terraces to reflect the form of earlier development within the village.

4.0 Area Definition - Entrances & Boundaries

The conservation area is well defined with Langstone Road to the west, the fields/meadow to the north and harbour to the east forming distinct physical boundaries.

4.1 Entrances

The approaches to conservation areas are always important in defining the boundaries and establishing the special characteristics of the area. There are two main vehicular entrances into the conservation area, both of which are from Langstone Road (A3023). There is also a pedestrian entrance into the conservation area, via the Wayfarers Walk from the Warblington / Emsworth direction which lie to the east.

4.1.1 Vehicular entrance into Langstone High Street

The first entrance is into Langstone High Street, characterised by wide visual splays on either side. It is marked by a significant 2m high curved brick wall on the north side which forms part of the boundary of Langstone Lodge. Adjacent to this wall are two, mature oak trees which provide a strong visual backdrop. The south side of the entrance is also marked by a 2m high brick wall although this is of a more modern design and squared off rather than curved. On this side of the entrance, there is a circular raised flower bed, built of brick and flint to mark the millennium.

The wide, defined entrance into the conservation area gives an impression to any visitor that they are crossing the threshold into an area which immediately differs to that of the main Langstone Road. This is emphasised by the raised flower bed which acts as a focal point, much like a welcome sign. Further to this, the high walls on either side almost act as though the entrance is a gateway into a separate village.

4.1.2 Vehicular entrance into the Ship Inn Car Park

The other entrance into the conservation area is through the car park of the Ship Inn, which is located further south along Langstone Road, just before the Hayling Island Bridge. On the east side of Langstone Road on the approach to the entrance, there is a small public toilet block and the freestanding sign for the public house. The entrance into the car park is marked by a low boundary hedge on the north side and a grass verge on the south side. The entrance leads straight into a level car park which serves both the Ship Inn and visitors to the area. The flat terrain allows immediate views of the harbour over towards both North Hayling and Warblington to the north. This reinforces the sense of having entered into a special area.

4.1.3 Pedestrian Entrance from the east via the Wayfarers Walk

The conservation area can be accessed via a pedestrian route which extends along the coastline and leads to the conservation area from Emsworth and Warblington. From this entrance, the harbour frontage including the Ship PH, as well as the Watch Tower, is clearly visible along with the Hayling Bridge and the north coast of Hayling Island. This elongated view clearly defines the development patter of the conservation area along this harbour frontage, as well as its coastal relationship.

4.2 Boundaries

4.2.1 Boundary with Langstone Road

Langstone Road physically separates the Langstone conservation area from more recent housing development to the west. This physical separation is reinforced by the mix of walls and fences that form the street frontage (and boundary) to properties within the conservation area, including Langstone Lodge, and The Saltings. The near continuous 2m high brick boundary walls form a visual as well as a physical barrier. The boundary wall to Langstone Lodge is more modern in parts with various elements having been replaced, whereas the wall to the rear of The Saltings uses more modern bricks. Beyond Coastguard Cottages the boundary to Langstone Road changes to a tall hedgerow before opening up to provide the first open views of the shoreline and Chichester Harbour. This continues down to the entrance as described in Section 4.1.2 and then onto the Hayling Bridge.

4.2.2 East and North Boundaries

The eastern boundary of the conservation area fronts onto Chichester Harbour. This is characterised by the strong shoreline and backdrop of predominantly listed buildings, including The Ship and Royal Oak Public Houses. The north boundary embraces the open land which forms the rural backdrop and an important component of the setting for the conservation area. A public footpath leading to Havant crosses the land affording views of the backs of the properties in the High Street.

The present conservation area boundary embraces the well defined historically significant area of Langstone. The robust boundaries form an appropriate physical and visual containment to the area. It is not considered that any changes are required to the present conservation area boundary.

5.0 Spatial Analysis

The spatial analysis looks in detail at the components that help define the area's special characteristics.

5.1 Development Pattern

Langstone High Street is the principal road in the village, running directly from Langstone Road to the harbour and foreshore. The properties along High Street together with those fronting the harbour, form the nucleus of the Conservation Area. The historic development has a strong linear form, with buildings set close to or immediately abutting High Street. These and Coastguard Cottages, slightly set back from the waterfront, have a tight urban grain. A looser set of historic buildings frame the harbour.

This historic street pattern and arrangement of buildings is a distinct characteristic of the area and is depicted in early OS maps. Like many harbourside villages, the hinterland of Langstone consisted of small hedged paddocks that would have been used for the grazing of heavy horses, oxen and calves. The construction of the new road to Hayling Island in 1824 which by-passed the village and the failure of the port to develop substantially, meant that Langstone was not subject to the same development pressures experienced by some nearby towns and villages such as Emsworth.

The linear pattern has been maintained as development as it extended westward along High Street. On the northern side of the street, buildings sit close to the road with the sense of enclosure reinforced by a variety of boundary walls. The more recent

development on the southern side, comprising Tower Gardens and The Saltings complement the historic pattern of development. This is through the replication of the linear street pattern and terraced blocks of buildings. However, one difference is that the front gardens are open plan with an absence of walls and fences. Off street parking is arranged in discreet courtyards allowing front gardens to be laid to grass. Collectively this provides an attractive environment enhanced by trees which are reaching maturity, adding to the visual amenities and contrasting with the hard landscape treatment elsewhere.

As a result of the tight layout within the residential core of the conservation area, namely Langstone High Street, Tower Gardens and The Saltings, there is minimal provision for off street parking. The majority of properties in Tower Gardens and The Saltings have allocated parking spaces located in separate garage blocks. Although properties in these two roads do have front gardens which at present are not enclosed by boundary treatments, none of these front plots have been converted into off street parking areas. The majority of properties in Langstone High Street do not have allocated, off street parking provision and as such, parking occurs on the street and in the adjoining cul-de-sacs. There are now generally a greater number of vehicles per household and in response to the resulting pressure for parking during evenings and weekends, on street parking in the conservation area is limited. Yellow lines are in situ to prevent the parking of vehicles within visibility splays.

North of the properties in Langstone High Street, the setting of the village has not altered significantly for the last 150 years with the field system remaining virtually unchanged. A public footpath crosses the fields to the north leading to the previous Hayling Billy line which extends up to Havant.

5.2 Use & Activity

The historic core of Langstone is acknowledged by Pevsner[3] as a '*small, self-conscious, impeccably preserved Hamlet, with an intricate relationship between tidal water and buildings*'. The conservation area now has a predominantly residential character, its original commercial raison d'etre having been surpassed.

Vestiges of the commercial and marine past remain such as the former malthouse, corn mill and Watch Tower but these buildings have now been converted to new, residential uses. The coastal location makes it a prime location to live and also a popular destination for tourists and leisure activities. Popular pursuits include walking, rowing or sailing. There has been a long standing marine association with Langstone and historically, boats would have been used for commercial purposes. This has since changed to leisure based marine activities such as rowing and sailing, both activities have clubs based in Langstone. There are two active rowing clubs. The waterside location also provides an attractive setting for the two public houses, the Ship Inn and the Royal Oak. These are particularly busy on warm summer days and are popular with visitors and locals.

Due to its coastal location, the character of the area can change significantly dependant on the season and weather. On crisp winter days it is often a tranquil backwater. In contrast balmy summer days will result in an influx of visitors and when combined with leisure activities such as rowing competitions, it becomes a vibrant and bustling place.

For those visiting the area, free parking is available in an area adjacent to the Ship Inn, to the north of the Hayling Bridge. This area of land is owned by Hampshire County Council and is leased to Havant Borough Council as an area of open space. Although it is generally used for car parking, it does not have spaces marked out and cars park around

[3] Pevsner,N – Buildings of England Series: Hampshire

the perimeter facing onto Langstone Road and the harbour. The conservation area is connected to Havant town centre by Langstone Road, which is used by local bus services. The former Hayling Billy line is now a pedestrian walkway and cycle path which also links the conservation area to the town centre.

5.3 Open Spaces

There are no formally laid out or purpose built open spaces in the conservation area. The area does however benefit from the open fields and network of public footpaths, including the Wayfarers Walk, which is a long distance footpath which follows the shoreline past the mill pond to Warblington and beyond to Emsworth. These features, together with the shoreline (revealed at low tide) and the harbour itself, provide opportunities for informal recreation.

5.4 Views and Vistas

The whole of the foreshore of the village is open to public access and views in and out across the harbour are consequently an integral and important element of the character of Langstone. The nature of these harbour views fluctuates with the state of the tide, with large tracts of inter-tidal land being exposed at low water, but whatever the state of the tide, the sense of space is the overriding impression. Although Hayling Island road bridge represents a significant man made element, the views generally represent a natural scene with tree screens masking the marina and hotel development on the north shore of Hayling Island.

The northern shoreline of the harbour between Langstone and Emsworth is remarkably unspoilt by development. When viewed from Langstone Bridge or Hayling Island, Langstone still represents the appearance of a small hamlet set within a rural hinterland. Indeed the attractive juxtaposition of these small domestic buildings, terminating in the Old Mill to the east, is an attractive focal point of these views. Trees form an important backdrop and an essential ingredient to the setting of the conservation area.

From the western end of Langstone High Street views are contained by the buildings outwards towards the harbour. The presence of the shoreline and harbour is not immediately apparent but unfolds on the approach.

5.5 Building Types, Important Walls and Boundary Features

There are a total of 15 buildings in the Langstone conservation area (see 5.6 below) which have listed building status and are therefore afforded statutory protection. As a general rule, the majority of the buildings in Langstone are simple cottages or converted commercial buildings. These have been built in the vernacular style using locally sourced materials and generally without any architectural pretentions. Building heights do not generally exceed two-storeys, a tradition followed by recent developments which have maintained the domestic scale of the village buildings such as the terraces in Tower Gardens and The Saltings. Langstone Towers and The Old Mill are obvious exceptions to this rule. Their scale and distinctive appearance provide local landmarks adding to the strong sense of place and quality of the area.

Apart from the boundary walls discussed in Sections 4.1.1 and 4.2.1, there are other sections of walls and boundary treatments which make a contribution to the overall character. The majority of these are situated on the north side of Langstone High Street, close to its western entrance, starting with a low brick and flint brick wall which extends along to the vehicular entrance point into The Mews. On the other side of this entrance the brick and flint wall continues but increases to a height of around 2m, before dropping in

height to form the frontage of No's 2A and 2B Langstone High Street, then terminating at the start of the first terraced row (No's 3 – 7a). Both walls are in sound condition and are of historical value probably previously forming the boundary between private land to the north, possibly that of Langstone Lodge and the main high street – Langstone High Street.

5.6 Listed Buildings

The Langstone Conservation Area contains 15 listed buildings all of which are Grade II listed, dating back to the 18th Century. The listed buildings are mainly clustered along the north side of Langstone High Street, around the Quay side and along the harbour frontage, reflecting the development pattern of the former commercial / marine character of the area. These listed buildings include:

- No's 8 – 14 Langstone High Street

This is a terraced row of cottages, all of which apart from No's 8 and 9, have a thatched roof of long straw (No's 8 and 9 have clay peg tiles). They are thought to have been built as fisherman's cottages. These are domestic in scale being only two storeys and the principal external materials are those of brick and timber windows and doors.

- No's 16, 17 and 18 Langstone High Street

This is a short terrace of houses which are of a timber framed origin but are now brick and render painted white. All have a shared pitched roof with clay peg tiles and No. 16 has a clay peg tile covering on the external, side facing façade. The upper windows are timber framed casements whilst the lower windows are timber framed sashes. Each of the three properties has 20th C additions at the rear, which are not highly visible from the street scene. They are similar in scale and proportion to No's 8 – 14.

- No. 20 Langstone High Street – The Royal Oak

This is an early 19th Century public house of painted brick with a clay tiled roof and ground floor sash windows with casements above.

- No. 22 Langstone High Street – The Old Mill

This is a former working mill from the early 19th Century. It now comprises a water mill (now a dwelling), a mill store (now a dwelling) and a former windmill which is attached to and has been converted as part of the dwelling. The water mill is built across a creek and is single storey with a half hipped, clay tile roof and painted brick on the front elevation. The mill store has one storey and is built on brick piers, allowing access beneath the barges in the tidal water. The dwelling has a half hipped roof, with a hipped dormer, with mainly boarded walls and casement windows. The windmill is a tapered circular tower of four-storeys, with the rendered walling being tarred.

- No 23 Langstone High Street – The Green Cottage

This is a dwelling of late 18th Century origin, with a 19th Century and 20th Century exterior. It has brick and rendered walls and a clay tiled roof. It is 1 storey with an attic area and half hipped dormers with 20th century casements.

- The Ship Inn

This is a former malthouse built in the late 18th Century, then converted into a public house in the mid 19th Century. It has painted brick walls (some stucco) and a clay tiled roof. It is

of 2 storeys with 6 windows along the east elevation. The public house features Victorian sashes and a half glazed, mid C19 porch.

- No's 59 and 61 Langstone High Street

These are a pair of C18 symmetrical houses located at the very top of the conservation area and front onto Langstone Road. They have weather boarded walls, casement windows and clay tiled roofs with 2 storeys and attics.

5.7 Locally Listed Buildings

The Council has produced a list of Buildings of Local Interest which include buildings within the Borough, which although not of a standard to be included in the statutory list, nevertheless contribute to local distinctiveness and are valued by local residents. These are buildings with certain attributes such as architectural merit, historical and cultural associations, townscape quality and relevance to the historical development or economy of the Borough. Although buildings on this list are not statutorily protected like listed buildings, PPS5 (Planning and the Historic Environment) advises that locally listed buildings contribute to the local context as a heritage asset and therefore consideration should be given to their character or setting with regards to any development proposals. The following buildings within the Langstone conservation area are locally listed:

- The Look Out and The Watch Tower

This building is situated just to the north east of the Ship Inn, facing onto the harbour. It originally comprised of a square, turret style watch tower which was thought to have been built in the mid C19. It originally consisted of a small room and store on the ground floor and a watch room on the first floor. A house known as the 'Look Out' was built onto the Watch Tower in 1925 and is built in brick, with slate roof tiles and yellow window dressings. When the house was built, the Watch Tower was also converted into habitable use, conjoined with the house.

- Coastguard Cottages

These are a terrace of nine cottages situated to the west of the Watch Tower. The terrace is constructed of red brick with slate roof tiles, chimneys and wooden sash windows, with buff brick quoin detailing. At the western end of the terrace one of the properties is larger as this was the former Officer's house. To the north of the terrace, each property has its own garden and there still exists the brick and slate outbuildings, earth closet, coal stores, domestic washhouse and the existing water pump in the Officer's garden which still has the original Admiralty crest. Three new dwellings have been constructed to the west of the terrace, which are of a sympathetic design and do not conflict with the character or setting of the existing terrace.

5.8 Positive Buildings

In addition to the statutory listed and locally listed buildings, there are two other unlisted buildings in the conservation area which make a notable positive contribution to its special interest. Buildings identified as positive, can be described as those which although not considered to be outstanding examples of buildings from the period of time they were built and therefore not listed, remain to be good examples of historic buildings where their style, setting, historical association and / or building materials are worthy of local level recognition in an assessment of the special interest of the area. These include:

- Langstone Lodge (No. 1 Langstone High Street)

This is a large detached dwelling set in a large plot which is accessible from a shingle driveway leading up from Langstone High Street. It was thought to have been built in 1875 as one of three large houses to be built at that time on Langstone Road. The boundary of this property forms the boundary of the conservation area with Langstone Road. It is a well preserved house from that period and is arranged over two storeys with pitched roof dormer windows on the front roof slope. It is of brick materials with a cream painted render frontage and bay window at ground floor level with Victorian sash windows. As a result of its well preserved appearance, materials and historic setting, it is considered that Langstone Lodge is a building which could be considered for inclusion on the list of Buildings of Local Interest.

- Langstone Towers

Langstone Towers, which is situated on the corner of Langstone High Street and Towers Gardens, is an unusual building in terms of architectural appearance and historical association. The tower was thought to have been constructed in the early C19 with further additions over the years. The tower includes a unique lead cupola on the top and attractive architectural details including corbelling and arched decorated windows. Langstone Towers has an important historical background as it was recorded to have been used in WW1 as a military hospital. Most notable of the extensions is a brick built chapel which was constructed onto the front of the tower in 1869, which includes an arched style window on the west elevation. This is regularly used by the local community for services. As a result of its well preserved appearance, materials and historic setting, it is considered that Langstone Towers is a building which could be considered for inclusion on the list of Buildings of Local Interest.

5.9 Building Styles, Materials and Local Details.

Generally red brick and clay tiles predominate as the principal building materials, although some buildings have subsequently been painted or rendered in whites, creams or light blues. Although some of the more historic buildings were built using timber frames, these are generally not visible from the external facades as they have since been walled and rendered. There is also the use of flint work in some external facades and along the walls mentioned in Section 5.3. Besides tiles, part of the listed terrace in Langstone High Street (Nos. 8 – 14) have thatched roofs while the 19th C saw the introduction of some slate roofs to the area i.e. Coastguards Cottages. Other materials are found including: stone in the Green Cottage and the use of flint in boundary walling. Also York stone has been used for the re-paving of part of Langstone High Street. Particular mention should be made to No's 59 and 61 Langstone Road which are a pair of late 18th C semi-detached, weather-boarded houses. This is an approach which has been used on the more recent development at Towers Gardens and The Saltings. Properties in both of these roads, feature plastic weather boarding cladding to the external façade, mainly at first floor level.

There is a sporadic use of roof light windows throughout the conservation area, mainly on buildings which are not listed. At present, apart from one property within the Coastguard Cottages terrace which has four roof light windows, these are limited to one or two roof lights and as such, do not have an overall negative impact on the visual character of the conservation area. Chimneys are also a strong feature in the conservation area being seen on the majority of properties including the more modern developments. With regards to windows, the majority, other than those within listed buildings, have been replaced with UPVc frames and double glazing. The widespread use of these materials is considered to be a negative feature within the conservation area and could be considered as an area for further control in the future.

5.10 Public Realm (Roads, Pavements & Street Furniture)

The public realm comprises those features which contribute to the publicly visible and accessible townscape. It is the treatment of the spaces between the buildings, made up of elements such as pavements, surfacing, street furniture, the quay sides, street lighting and signage.

Other than buildings and boundary walls, due to the tight knit nature of the urban development within the centre of the conservation area including Langstone High Street, Towers Gardens and The Saltings, there is little in the way of street furniture. However, there are some wooden benches and seating on the quay side with views out over the harbour. Street lighting exists in the form of black, cast iron lighting poles topped with glass lanterns which are in keeping with the historic character of Langstone High Street.

In terms of paving, part of the pathway in leading from the Old Mill down to the top of Langstone High Street comprises York flagstones which contribute to the historic character. However, this does not apply to the remainder of pavements in the conservation area which are tarmac.

The surface of the car park which serves the Ship Inn currently consists of different materials, some shingle, paving and tarmac, with no bay definition. The tarmac is badly cracked in places as a result of weather deterioration over a number of years and as a result, conflicts with other forms of attractive surfacing in the conservation area such as the York flagstones situated on the quaysides at the end of Langstone High Street. The car park has added importance as it serves as one of the key entrances to the conservation area. This is an issue which merits improvement and is covered in the Management Proposals.

Langstone Conservation Area Review - Character Appraisal and Management Plan

Part 2 – Draft Management Plan

1.0 Format of the Management Plan

Part 1 of this document has provided a character appraisal of the Langstone Conservation Area, which has sought to draw out the characteristics which define the area as being of special architectural or historic interest, of which it is desirable to preserve or enhance. Part 2 of this document will be the Management Plan. The Management Plan seeks to monitor the effects of change and establish responsibilities for the Local Planning Authority taking any necessary action. The following list of suggested actions and management proposals aims to assist in the recognition and protection of the Langstone Conservation Area's special qualities and to encourage its enhancement. Some are already in place, or have begun, but may require further co-ordination.

2.0 Issues

2.1 The Control of New Development

The character appraisal has identified positive elements, which are fundamental to the area's special character. At present, certain alterations could be carried out without the need for planning permission including changes to windows, boundary walls, front gardens, roof slopes, chimneys etc, which could undermine the area's special character. There is already evidence of this in the form of unsympathetic alterations such as UPVc windows, which have already taken place.

2.1.1 Article 4 (1) Directions

A method for addressing the need for further control is the use of an Article 4 (1) Direction, which has proved successful when applied elsewhere. Such a direction can bring within planning control, small scale, incremental changes which could be carried out without the need for planning permission. It was resolved by the Council in July 2011 that the form and content of any Article 4 (1) Directions could include control over the following:

- Insertion of roof light windows
- Erection of boundary treatments up to 1m in height
- Removal of chimneys
- Off street parking and / or hard surfacing on existing garden frontages
- Painting of external facades on buildings / walls
- Alterations to roof coverings
- Insertion of solar thermal equipment such as solar panels
- Removal of existing boundary walls

These types of small incremental changes could in themselves, have a detrimental effect on the character of the area by eroding its special qualities. as identified in the character appraisal. For example, the insertion of too many roof lights or solar panels, could alter the uninterrupted roof slopes which provide a sense of architectural rhythm and balance. Alterations to roof coverings could result in inappropriate tiles being used which are not in keeping with the character of the conservation area. The erection of boundary treatments on currently open frontages or the hard surfacing of grassed front gardens, could detrimentally harm the visual appearance on the street scene.

An Article 4 (1) Direction does not necessarily mean that all such development is unacceptable, but it would bring proposals for development within planning control and provide the opportunity to consider the potential impact on the conservation area, thus ensuring its future protection and / or enhancement.

2.1.2 Design Guidance

General design advice is included within the Havant Local Development Framework, the Borough Design Guide and the Chichester Harbour Conservancy's Design Guidelines for extension and new dwellings. Further information on the elements of the conservation area such as the local palette of materials, is contained within the character appraisal and the Langstone Village Design Statement.

Overall, any proposed changes to a building in the conservation area should be sympathetic to the original design, scale, materials and setting of the building and respect the historic grain of development established by the existing plot boundaries and existing historic buildings. As highlighted in Section 7.1.1, unsympathetic extensions can change the form and character of a building significantly, therefore the original architectural characteristics of buildings (in particular original windows and roof coverings) should be respected and retained – and reinstated wherever the opportunity arises when improvements are necessary. It is recommended that where possible, owners should always use the appropriate professional advice (registered architects, chartered surveyors, or pre-application advise from the LPA) in order to ensure the best benefit from their building proposals.

The Council's generalised advice would include:

- The importance of the roofscape means that alterations need to be carefully considered so as to maintain their simplicity i.e. avoiding bulky dormer windows or inserting a proliferation of roof lights.
- The loss of front boundary walls should be avoided.
- Encroachment of car parking onto existing landscaped areas.
- Painting over materials of loss of architectural details.

2.2 Opportunities for Enhancement and Improvement

An essential part of the principle of conservation areas is to preserve or enhance the special or historic interest of the conservation area. Through carrying out the character appraisal, the following elements have been identified as opportunities for enhancement or improvement.

2.2.1 Open space to the south of the Ship Inn

The open space owned by Hampshire County Council (leased to Havant Borough Council) to the south of the Ship Inn, is currently used as a public car park for visitors to the area and customers for the Ship Inn. As identified in Section 5.1 of the character appraisal, this area could benefit from a sympathetic resurfacing.

2.2.2 Improvements to the Public Realm

Taking a co-ordinated approach together with Hampshire County Council towards highway repairs, re-surfacing, tree planting, maintenance, cleaning and street furniture. This would include improvements to the seating around the harbour and retention of appropriately designed street lighting throughout the conservation area, to underpin the area's historical significance.

With constraints on public funding, there is unlikely to be an opportunity to implement large scale environmental improvements in the short term. There may be opportunities to make small scale improvements as part of more general maintenance works i.e. when resurfacing becomes necessary, or if developer contributions become available.

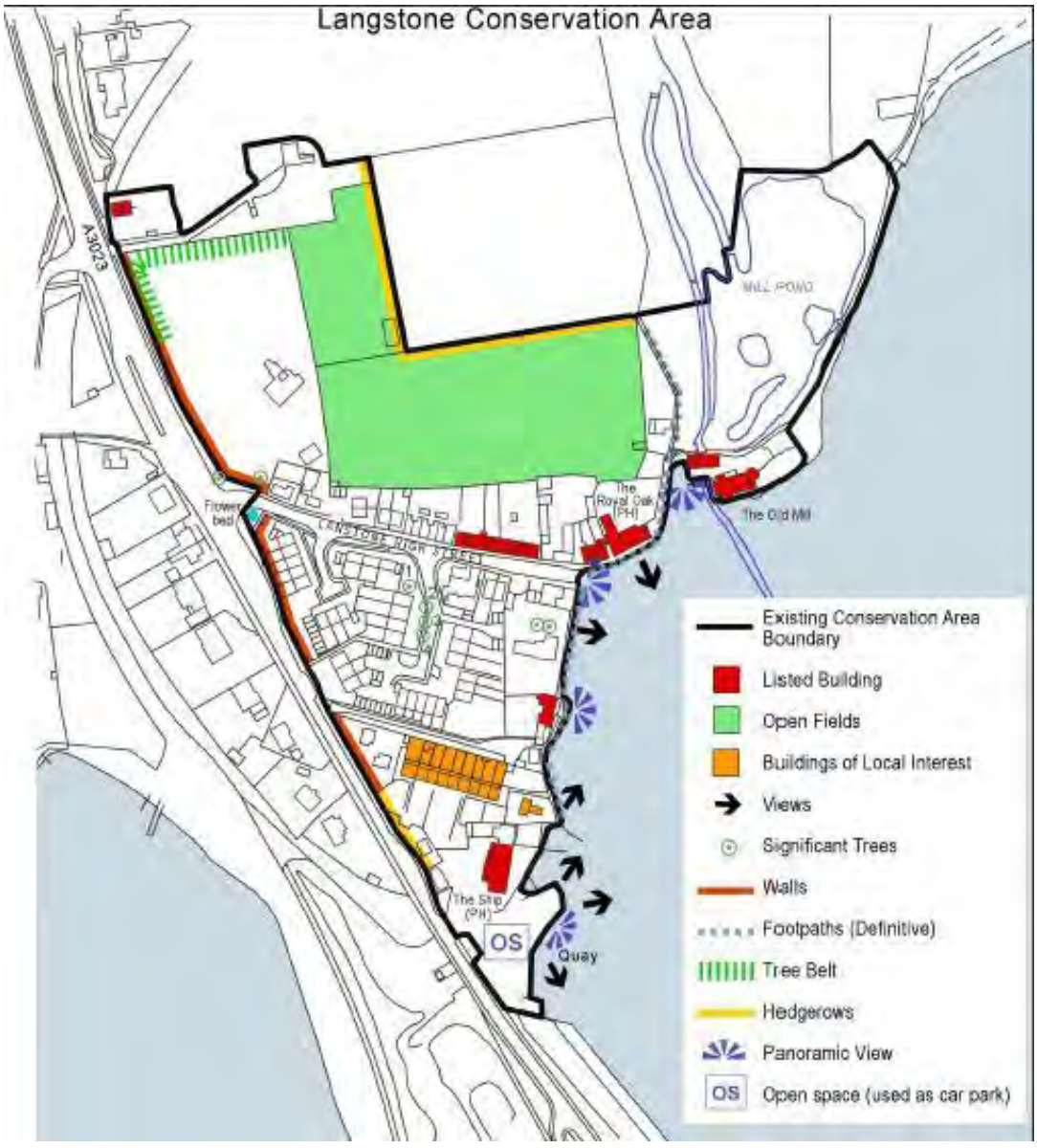
2.2.3 Additions to the List of Buildings of Local Interest

The List of Buildings of Local Interest for Havant was last updated in 2005. From the appraisal, the following buildings are considered to be of merit and are recommended for inclusion on this list:

- Langstone Lodge
- Langstone Towers

3.0 Recommendations

1. The Council implement an Article 4 (1) Direction to cover unlisted buildings in the conservation area.
2. Design advice to be promoted.
3. Environmental enhancement to be encouraged.
4. The List of Buildings of Local Interest to be updated to include the two buildings properties identified in Section 2.2.3.
5. Improvements to the public realm if or when resources become available.



Havant BOROUGH COUNCIL



Mill Lane
Conservation Area Character Appraisal & Management Plan

Mill Lane Conservation Area
Character Appraisal & Management Plan

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PART 1 – CHARACTER APPRAISAL

1. Introduction to Conservation Areas

1.1 Definition of a Conservation Area

Conservation Areas are defined as:

Areas of special architectural or historic interest, the character of which it is desirable to preserve or enhance.

Such areas can be rural, urban or mixed but all have special character. Once designated the local planning authority has a duty to pay special attention to the desirability of preserving or enhancing the character or appearance of the area, in the exercise of its planning functions. Over 9000 conservation areas have now been designated in the UK. The responsibility for the designation of such areas and their protection lies primarily with the local planning authority.

1.2 Planning Policy Context

1.2.1 National Planning Policy

The concept of conservation areas arose from the 1967 Civic Amenities Act and is now contained in the Planning (Listed Buildings and Conservation Areas) Act 1990 (P(LBCA)Act 1990). Section 71 of this Act requires local planning authorities to formulate and publish proposals for the future preservation and enhancement of their conservation areas and for this to be reviewed from time to time. As part of the conservation area designation, local authorities are required to produce a character appraisal. For existing conservation areas, the provision of up to date character appraisals are advised as a matter of best practice. A clear, comprehensive appraisal of the character of a conservation area provides a sound basis for development management, guiding action and for developing initiatives to improve the area if required.

Additional government guidance regarding the management of historic buildings and conservation areas is set out within the *National Planning Policy Framework (March 2012)* which has superseded *Planning Policy Statement 5: Planning and the Historic Environment* (PPS5). This states that *"When considering the designation of conservation areas, Local Planning Authorities should ensure that an area justifies such status because of its special architectural and historic interest and that the concept of conservation is not devalued through the designation of areas that lack special interest." (paragraph 127)* The current proposal for reviewing the Conservation Area Character Appraisal has been considered against this test and is thought to comply with it.

The Core Principles (Para 17) of the National Planning Policy Framework also lay great emphasis on conserving heritage assets in a manner appropriate to their significance. Para 126 lists the wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring and the desirability of new development to make a positive contribution to local character and distinctiveness.

1.2.2 Local Planning Policy

Local planning policies are set out in the Local Plan and other planning policy documents. The Local Plan currently comprises the Local Plan (Core Strategy) and the Local Plan (Allocations). Conservation area documents such as this Appraisal will form part of the portfolio of planning policy documents which act as a material consideration in planning decisions.

1.2.3 Conservation Area Character Appraisals

English Heritage has produced various guidance on conservation areas. The most recent 'Understanding Place; Conservation Area Designation, Appraisal and Management' (March 2011) has been consulted in the preparation of this Appraisal.

The key features of a character appraisal are to:-

- Identify the significant features which contribute towards its character
- Provide a clear historical and visual assessment of the place and generate awareness of the area's significance to key stakeholders.
- Provide residents with a clear understanding of what is important about the conservation area
- Provide the Council with valuable information which can guide and inform planning related decisions in that area.

1.2.4 Management Proposals

An important outcome of character appraisals will be to inform appropriate management proposals for the area, which English Heritage advise should be set out in a specific document called a Management Plan. The objective of the Management Plan is to identify actions for the preservation or enhancement of the particular conservation area, such as proposals to address buildings at risk, environmental enhancement etc.

2. Location and Context

2.1 Location and Setting

Mill Lane lies approximately three quarters of a mile to the south of Havant town centre and the A27 bypass which leads to Chichester. It is situated between the main road (A3023) to Hayling Island and the coast on a low lying plain, at the confluence of Langstone and Chichester Harbours. Langstone Bridge (leading to Hayling Island) lies immediately to the south of the conservation area. Away from the main traffic arteries, areas of tranquillity can be found, in particular adjacent to the harbour edge.

Mill Lane was first designated in March 1985 and is one of four conservation areas in the Borough which border Chichester and Langstone Harbours – see Map. Two of the Conservation Areas at Emsworth and Langstone recognise and seek to protect the townscape quality adjacent to the waterfront. The designations of Mill Lane and Warblington protect the more open, historic landscape adjacent to Langstone and Chichester Harbours. The coast defines the southern boundary of the conservation area.

The conservation area encapsulates what was part of the historical hamlet of Langstone that evolved around the harbour, but is now divided by Langstone Road (A3023). To the east and immediately adjacent to the Conservation Area lies the popular path, known as the Hayling Billy Leisure Trail which follows the route of the former railway that connected Havant with Hayling Island. The western boundary of the conservation area is formed by the Lavant stream that runs south to Langstone Harbour; the land adjacent to the stream is largely undeveloped.

The conservation area straddles two types of topography including the low lying shoreline to the south and the flat green fields which lie beyond the conservation area to the north and west. The conservation area therefore is generally flat and as a result of its proximity to the harbour, most of the conservation area is situated within Flood Zones 2 and 3 as identified by the Environment Agency. This means that the area is more susceptible to a risk of flooding. In terms of providing means against the impact of flooding for individual properties, further information can be sought from the Council or the Environment Agency.

2.2 National Significance

The southern portion of the conservation area has a unique coastal setting, with the harbour and its wetlands having national and international significance for their environmental and nature conservation interest. This is recognised through a number of designations, including the International Wetlands (RAMSAR) convention, European designated Special Area for Conservation (SAC) and Special Protection Area, and nationally designated Site of Specific Scientific Interest (SSSI).

3.0 Historical Development of Mill Lane Conservation Area

3.1 Archaeology

This area of Langstone Harbour has evidence of human activity from prehistoric times to the present day. Finds of stone tools show that people were living in the harbour and were probably hunting and gathering food and resources. Neolithic stone tools have been also found to the south of the conservation area. In the Bronze Age this area appears to have been a focus for burying the dead with a number of cremation burials found during excavation for a pipeline in the garden of a property on Mill Lane.

In later pre-history the production of salt became an important aspect of this area and within the conservation area Iron Age/Romano-British pottery has been found associated with evidence of salt production to the south of Mill Lane. There is a historic Saltern known to be located where the stream that runs to the west of Mill Lane runs into the Harbour. The origins of this are unknown but it may be a continuation of salt production that was taking place in this area for over 2000 years.

Langstone was an important area in the Roman period and the A3023 follows the line of the Roman road that ran from Hayling Island to Havant. While there is no record of Roman remains in the Mill Lane Conservation Area there is the potential for previously unidentified Roman remains to be present, particularly relating to salt production.

3.2 The Development of Mill Lane

An aspect of the character of the Mill Lane Conservation Area is its historical association with Langstone Village. In 1817 Butler wrote in the 'Hundred of Bosmere' the "The hamlet of Langstone stands at the entrance to the ford or wadeway and contains three mills, twelve houses and a public house". The section of Langstone Road from Langstone High Street southwards did not exist at this time and Mill Lane was a western extension of the High Street giving assess to the 'third' mill, known as West Mill, and beyond to South Moor.

The construction of the first road bridge to Hayling Island in 1824 bisected the hamlet and separated Mill Lane from Langstone Village. This separation was reinforced in 1865 when the branch railway line was constructed from Havant to Langstone Shore. Unlike the earlier road link between Hayling Island and the mainland, which followed Langstone High Street to the wadeway, these newer communication routes by-passed the area and both Langstone High Street and Mill Lane were spared the consequences of increasing traffic remaining largely unspoilt.

Significant residential development has followed the construction of the main road creating a largely linear suburban townscape of very different character to the historic (Langstone)village core. The most significant recent development within the conservation area is Harbourside, first approved in the 1960's but not completed until the early 1990's.

4.0 Area Definition - Entrances & Boundaries

The conservation area is well defined by the immediately adjacent Hayling Billy Trail to the east, the Lavant Stream to the west, fields/meadow to the north and harbour to the south forming distinct physical boundaries.

4.1 Entrances

The approaches to conservation areas are always important in defining the boundaries and establishing the special characteristics of the area. There is one main vehicular entrance into the conservation area, which is from Langstone Road (A3023).

There is a pedestrian entrance into the conservation area, via the Hayling Billy Trail which follows the route of the Havant to Hayling Island railway line. The Wayfarers Walk / Solent Way also bisects the Conservation Area from the harbour to the west to Langstone / Warblington to the east.

4.1.1 Vehicular entrance into Mill Lane

The only vehicular entrance into the conservation area is characterised by wide visibility splays on either side. The entrance is demarked with mature trees on either side with mature hedging stretching to the south that also bounds the Hayling Billy Trail.

The wide, defined entrance into the conservation area is a transition point between the suburban housing along the busy main road, and a more tranquil environment with houses set in larger plots. This is further emphasised by the trees and hedging which act as focal points to entering a more rural area.

4.2 Boundaries

4.2.1 Eastern boundary with Langstone Road

Langstone Road physically separates the Mill Lane conservation area from Langstone conservation area to the east. The physical separation is reinforced by a mix of mature hedging and trees that form the boundary to the Hayling Billy Trail. This feeling of green boundaries continues from the entrance into Mill Lane to the properties at Harbourside; a number of the individual trees adjoining this route are protected by tree preservation orders.

4.2.2 Southern, Northern and Western Boundaries

The southern boundary of the conservation area fronts onto Langstone Harbour. This is characterised by the strong shoreline and back drop of the large rear gardens of 5 – 9 Harbourside. The northern and western boundaries adjoin the open land which forms the rural backdrop. The land to the west forms part of South Moor and lies beyond the Lavant stream; that immediately to the north is an open field which is separated from the conservation area by a well defined urban edge comprising a mix of brick wall and boundary fencing/planting. These adjacent open areas form an important component of the setting for the conservation area.

The present conservation area boundary embraces the well defined historically significant area of Mill Lane. The robust boundaries form an appropriate visual containment to the area. It is not considered that any changes are required to the present conservation area boundary.

5.0 Spatial Analysis

The spatial analysis looks in detail at the components that help define the area's special characteristics.

5.1 Development Pattern

The conservation area is dominated by large houses set within generous plots. These plots often have dense hedgerows and front garden vegetation that retain a semi-rural character. The later development of Harbourside although of a more suburban design maintains this pattern of development and is not particularly prominent from Mill Lane. It is enhanced by the mature trees, many of which are the subject of a tree preservation order.

The garden sizes and green boundaries of the properties in the conservation area help to retain a rural feel to this area. Mill Lane in particular with its hedgerows and trees retains the character of a rural lane and although now the focal point of a cluster of detached houses, these generally occupy spacious well landscaped gardens and sit comfortably within this rural character.

5.2 Use and Activity

The Conservation Area is now wholly residential although its history with the now demolished mill relates to a more commercial past. The coastal setting of the Conservation Area makes it a prime location in which to live and also a popular destination for leisure activities. Popular pursuits include walking, cycling, rowing or sailing.

Due to its coastal location, the character of the area can change significantly depending on the season and weather. On crisp winter days it is often a tranquil back water. In contrast balmy summer days will often see people cycling or walking along the Hayling Billy line or the Wayfarers Walk/Solent Way coastal path.

For those visiting the area there is very little parking available within the Conservation Area itself. Free parking is available in an area adjacent to the Ship Inn within the Langstone Conservation Area. The Conservation Area is connected to Havant town centre by Langstone Road, which is used by local bus services. The former Hayling Billy line is now a pedestrian walkway and cycle path which also links the conservation area to the town centre.

5.3 Open Spaces & Trees

There are no formally laid out or purpose built open spaces in the conservation area. The area does, however, benefit from the open fields and network of public footpaths, including two long distance footpaths (Solent Way & Wayfarers Walk) that follow the shoreline to Portsmouth or the Hayling Billy Trail from Havant to Hayling Island. These features, together with the shoreline (particularly revealed at low tide) and the harbour itself, provide opportunities for informal recreation.

Trees make an important contribution to the areas semi-rural character and have interim protection by virtue of the conservation area designation. The more important specimen trees within Mill Lane and Harbourside are protected by Tree Preservation Orders. There are a number of fine specimen's visible framing the street scene, front gardens and forming a backdrop to the buildings where trees are located to the rear. Views from within the Conservation Area are enhanced by the constantly changing colour and form of the trees

5.4 Views and Vistas

From within the heart of the Conservation Area the flat topography, built form and natural features limit views across the landscape to the harbour edge and beyond. However, from the harbour side, there are footpaths where the views are long and open to the surrounding harbour landscape.

Looking outwards from the harbour itself, there are significant views west towards South Moor and onto Portsmouth in the distance. To the south the rural shoreline of Hayling Island can be seen.

Despite the newer of development of Harbourside, the Mill Lane Conservation Area still makes an important contribution to the open sweep of land, when viewed from the harbour running from marshland at South Moor to the west and Hayling Island to the South.

5.5 Building Types, Styles, Materials and Local Details

Buildings are generally of a medium to large domestic scale, with fully pitched roofs, mainly detached two-storey and set in generous sized plots. Roof types are mostly gabled or hipped with plain tiling or natural slate being the noticeable materials. Buildings are usually orientated with the ridge running parallel to the road, and many are set back from the front boundary.

Generally red brick and plain clay tiles predominate as the principal building materials, although some buildings have tile hanging and others slate roofing. There

is also the use of well executed flint work on Flint House and the associated Flint Lodge. With some notable exceptions (see 5.6 below), the area is not architecturally rich. Its character is derived more from the way the buildings nestle in the landscape.

There is relatively little punctuation of roofs by dormers. Where such features do prevail they are of a scale and proportion that does not dominate. Chimneys are an important architectural feature both in relation to individual buildings and also as part of the wider built townscape.

Window openings are generally side hung casements which are well proportioned adopting a vertical emphasis. The vast majority of the windows in the area are double glazed with a mixture of UPVc and timber frames. Due to the 20th century style of housing that is prevalent in the Conservation Area, double glazing can be more readily assimilated without compromising character. The use of UPVc windows is a more negative feature, particularly on the older properties and could be considered as an area for further control in the future.

5.6 Particularly notable unlisted buildings and buildings which have positive streetscape value

The area contains no buildings on either the Statutory List of Buildings of Special Architectural or Historic Interest or the Council's Local List. There is nevertheless a number of buildings which make a strong and positive visual contribution to the character of the area. Their style, character, historical form, association and/or building materials are all examples of what can make these buildings locally distinctive. These include:

- West Mill

West Mill is situated at the western end of Mill Lane and is a two storey red brick building with blue headers and a clay tiled roof. This building and the two other buildings within its curtilage, now used as a garage and studio are clearly identified on the 1865 Ordnance Survey Map and on the Lewis' 1833 Parish Map as part of the building group associated with West Mill. The Mill building itself, an imposing five storey brick structure was demolished in 1936 although the mill race, mill pond and quay can still be seen. The Lavant Stream, rush of water and associated sound, adds to the ambience of this part of the Conservation Area.

- Flint House & Flint Lodge

Flint Lodge (now divorced from Flint House) is situated at the eastern end of Mill Lane, and forms a distinctive feature at the entrance to the conservation area. Flint House is a more imposing building once served by the Lodge, and is partially concealed by tall boundary trees and hedges. Both were constructed in the late 19th century. The buildings are faced in knapped flint with stone window bays, brick dressings and natural slate roofs.

5.7 Important Walls and Boundary Features

Walls, hedgerows and low timber fences provide a strong definition of property boundaries throughout the conservation area. Walls of particular note are those that would have formed the original boundary of Flint House to the north and west. Both walls are constructed of red brick and are fairly high. The north wall delineates the northern boundary of the conservation area from the open field. This has a strong

visual presence in views from Langstone Road separating the different character of these land uses.

Other significant walls are on the boundary of Sweetwaters with an access driveway that leads to Tulip Tree House, and the flint and brick walls leading to West Mill.

5.8 Public Realm (Roads, Pavements & Street Furniture)

The public realm comprises those features which contribute to the publicly visible and accessible landscape. It is the treatment of the spaces between the buildings, made up of elements such as pavements, surfacing, street furniture, street lighting, signage and trees.

Other than buildings, boundary walls and hedging, due to the rural character along Mill Lane, there is little in the way of street furniture. Street lighting only exists in Harbourside which consists of black, cast iron poles topped with glass lanterns specifically selected in recognition of the Conservation Area.

In terms of paving there is very little due to the rural nature of the Conservation Area. A small section of tarmac pavement exists, leading from Mill Lane to Harbourside. However, the remainder is characterised by grass verges and hedging.

6.0 Review of positive and negative features and opportunities for enhancement

6.1 Positive features

- Trees

A varied and abundant selection of trees, largely in private ownership but clearly visible from the public realm are a great asset contributing to the character and appearance of the conservation area

- Rural character

The conservation area is dominated by large houses set within generous plots. These plots often have dense hedgerows and front garden vegetation that retain a semi-rural character.

- Views

Views into and out of the Conservation Area add to the character of the area - open and long views out from the harbourside; large gardens and vegetation when looking into Mill Lane.

- Water

The location adjacent to the coast and open nature of the foreshore. The Lavant Stream, bridge crossings and the sound of water, particularly over the old mill race.

6.2 Negative features

- Loss of architectural features

It has been noted that some of the unlisted ‘positive’ buildings in the Conservation Area have been adversely affected by the insertion of Upvc windows or doors. These changes are usually ‘permitted development’.

- Roofs and Dormers

The installation of solar panels on the front or otherwise prominent roofslopes has interrupted what was a simple receding roof form.

6.3 Opportunities for enhancement

In Mill Lane most opportunities for enhancement will occur through the careful implementation of local and national planning policy in relation to planning permission and conservation area consent applications.

- Quality of New Development

The Mill Lane Conservation Area has enjoyed success as a settlement over many years and as a results has developed an attractive high quality built environment, well connected to and reflective of the surrounding landscape. However, pressure to develop land and provide housing is ever-present in today's society and there is likely to be continued pressure in the medium term to find and develop sites adjacent to the Conservation Area. Such proposals can produce both opportunities and threats and would need to be considered very carefully in order that the community benefits and importance of the character and appearance of the Conservation Area are given sufficient weight and are not compromised by the desire for commercial and financial gain.

- Article 4 Direction

Under the auspices of the 1990 Planning (Listed Building and Conservation Areas) Act there is a mechanism to remove permitted development rights by way of an Article 4 Direction. An Article 4 Direction could be implemented in the area to promote the retention of timber framed windows

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Part 2 – Management Plan

1. Introduction

Part 1 of this document, the Character Appraisal, has identified the special positive qualities of the Mill Lane Conservation Area which contribute to the character of the Conservation Area. Part 2 of this document, the Management Plan, aims to build upon the positive features and assess the negative features and issues which have already been identified, in order to provide a series of Issues and Recommendations for improvement and change.

The structure and scope of this document is based on the suggested framework published by English Heritage in Understanding place: Conservation Area Designation, Appraisal and Management (2011). Both the Conservation Area Character Appraisal and the Management Strategy will be subject to monitoring and reviews on a rolling work programme.

2. Issues and Recommendations

The following section details proposed actions to address some of the principle positive and negative features which were identified as part of the Character Appraisal process in Bentley in order to ensure the continued protection and enhancement of the conservation area.

Issue 1 Erosion of Character

a) The loss of original architectural details

Within the conservation area there are buildings which have been unsympathetically altered with solar panels prominently situated on principle roof slopes. These currently fall outside of planning control, classed as “permitted development”. Cumulatively this can have a significant negative effect on the character and appearance of the conservation area.

Whilst solar energy has many positives in an historic asset such as a Conservation Area they should be sited in less prominent positions: on rear roof slopes, in roof valleys, behind parapets, within the perimeter of flat roofs, on ancillary buildings etc.

Recommendation 1

Implementation of a selective Article 4 Direction within the Mill Lane Conservation Area, removing permitted development rights to replace windows and doors in the positive buildings as outlined in the appraisal.

Consideration should also be given to a wider Article 4 Direction to remove permitted development rights for the removal of chimneys and the introduction of solar thermal/photovoltaic equipment. This will ensure control of elements that could cause potential of harm to the character of the conservation area.

Issue 2 Impact of New Development

a) Setting of the Conservation Area

Mill Lane is an attractive residential area. The Conservation Area Character Appraisal has identified the significance of views into and out of the conservation area, and the rural character as an important component of its setting. There are very few if any small sites within the boundary of the conservation area that could be re-developed, however there are some larger sites close to the boundary which could in the future come under pressure for development and may detrimentally impact on its setting.

b) Significant Buildings

Buildings individually and collectively contribute to the area' special character. Their impact depends on their visual presence, quality of detail relative to the intended use and character. As part of the appraisal process, buildings have been assessed for the contribution to the character and appearance of the conservation area. As recommended by English Heritage and in the NPPF positive buildings have been identified and are marked on the Appraisal Map. Generally, these are individual buildings which retain some original character and architectural detailing, adding strong interest and vitality to the character and appearance of the conservation area. By flagging up the buildings in this way it is hoped their value will be more widely understood and appreciated. An appropriate robust approach is required to their retention and to avoid unsympathetic alterations.

There are no buildings that significantly detract from the character of the area. Many of the buildings have a more passive neutral role, neither having a significantly marked impact in enhancing or detracting from the quality of the area. These buildings are left unmarked on the Appraisal Map.

c) Trees and Landscape

The importance of trees and the rural character within which the conservation area is set are identified as key contributors to the area's special character. Poorly considered development which poses a threat to trees within the conservation area, or those outside which nevertheless may make a significant contribution but not necessarily be afforded protection, could be detrimental to the to the conservation area.

Recommendation 2

a) New development which does not respect or preserve the traditional spatial form of historic development should be resisted.
b) The overriding presumption is for the retention of the 'positive' buildings and enhancement of the established streetscape. There will need to be a compelling justification for total demolition and redevelopment.
c) Encourage the retention of hedgerows as boundary features around dwellings and retain/encourage new tree planting within rear gardens to conserve the appearance of the area

3. Monitoring and Review

Both the Conservation Area Character Appraisal and the Management Strategy will be subject to monitoring and reviews on a rolling work programme. This should entail:

- Periodically review the effectiveness with which the service addressed pressures for change;
- Update the baseline photographic survey of the Mill Lane Conservation Area on a four yearly basis;
- Review the Mill Lane Conservation Area Character Appraisal on a five-year basis.

Bibliography/Sources of Information

- Havant Borough Townscape, Landscape and Seascape Character Assessment
- Existing Conservation Area Leaflet for Mill Lane
- Chichester Harbour Conservancy's Design Guidelines
- Havant Borough District Wide Local Plan (2005 -2011)
- PPS5 Practice Guide
- NPPF
- Understanding Place: Conservation Area Designation, Appraisal and Management
- Langstone Village Design Statement

Annex E- Site Clearance Drawings

ISO A1 594mm x 841mm
Scale: 1:250 @ A1

Drawn:
Approved:
Checked:
Designer: P02.1
Project Management Initials:
Revision:

ACCESS ROUTE SUGGESTED BY ECI CONTRACTOR. SEE INSET A

BOLLARDS TO BE CAREFULLY REMOVED AND REINSTATED UPON COMPLETION. SEE NOTE 10.

TREES MAY BE RETAINED WITH MITIGATING MEASURES SUCH AS COPPICING AT GROUND LEVEL

TEMPORARY DIVERSION OF OVERGROUND TELECOMMS POTENTIALLY REQUIRED FOR CLEARANCE WORKS

VEGETATION CLEARANCE. 6m FROM EXISTING CENTRELINE ON LANDWARDS SIDE. SEE NOTE 14.

FRONTAGE 1A

EXISTING GATE TO BE RETAINED. SEE NOTE 11

VEGETATION CLEARANCE. 3.5m FROM EXISTING PATH CENTRELINE ON SEAWARDS SIDE. SEE NOTE 14.

FENCELINE RETAINED. SEE NOTES 11 AND 12.

TREE IMPLICATIONS DETERMINED WITH INPUT FROM PROJECT ARBORICULTURIST.

EXISTING GATE TO BE RETAINED. SEE NOTE 11

EXISTING GATE TO BE RETAINED. SEE NOTE 11

FRONTAGE 2

CLEARANCE EITHER SIDE OF EXISTING FOOTPATH FOR SITE ACCESS.

BOLLARDS TO BE CAREFULLY REMOVED AND REINSTATED UPON COMPLETION. SEE NOTE 10.

INSET A - SITE CLEARANCE EXTENTS

Langstone Villa

El Sub Sta

0 6.25 12.5 m
1:250

0 6.25 12.5 m
1:250

KEY

TREE PROTECTION ORDER:
- TPO Point - Tree
- TPO Area
- TPO Woodland

EXISTING TREE SURVEY:
- Tree Canopy
- Trees of A (high) grading
- Trees of B (moderate) grading
- Trees of C (low) grading
- Trees of U (fell) grading
- Root protection area (RPA)

FOR TREE SURVEY DETAILS REFER TO DRAWINGS 1241.BJH.01.02-SHEETS 1-4

TREE CLEARANCE:
- Trees that will be unaffected by the development proposals.
- Trees that may be retained with mitigating measures applied - Arboricultural expert supervised 'hand dig' trenching works and root severance exercise.
- Trees that would not survive the development works and will need to be removed.

SITE CLEARANCE:
- General Site Clearance
- General Vegetation Clearance
- Vegetation Clearance - Schedule 9 Plants
- Breaking Out - Structures
- Breaking Out - Footpath/Carpark Surfacing
- Foreshore Access

SAFETY HEALTH AND ENVIRONMENT INFORMATION

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AECOM

PROJECT

Langstone Flood and Coastal Erosion Risk Management Scheme

CLIENT

HAVANT BOROUGH COUNCIL

CONSULTANT

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Basingstoke, Hampshire,
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NOTES

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5. EXISTING PATH LEVELS VARIES ALONG DEFENCE LENGTH, AND BEACH LEVEL VARY SPATIALLY AND WITH TIME.
6. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RISK REGISTER (LANG-ACM-ZZ-ZZ-RK-ZZ-000106) FOR ANY IDENTIFIED POTENTIAL RISKS.
7. ALSO REFER TO DRAWINGS:
GENERAL ARRANGEMENT - #011101
MODEL CROSS SECTIONS- #031102
TYPICAL DETAILS - #051103

DRAWING SPECIFIC NOTES:
8. SITE CLEARANCE PLANS SHOULD BE READ IN CONJUCTION WITH THE DESIGN DRAWINGS FOR ANY SPECIFIC REQUIREMENTS FOR THE REMOVAL OF SPECIFIC STRUCTURES AND STREET FURNITURES.
9. SITE CLEARANCE PLANS SHOULD BE READ IN CONJUCTION WITH LANG-ACM-ZZ-F1A-DR-ZZ-011102 FOR BURIED UTILITIES.
10. CONTRACTOR SHOULD REMOVE STREET FURNITURES, INCLUDING SIGNAGE, AS NECESSARY TO CONTRACTOR METHODOLOGY. IF REMOVAL REQUIRED, IT SHALL BE CAREFULLY REMOVED STORED SAFELY AND EITHER REINSTATED OR DISPOSED OF ON COMPLETION. IF REMOVAL NOT REQUIRED, THE CONTRACTOR SHOULD TAKE NECESSARY PRECAUTIONS TO ENSURE CONSTRUCTION WORKS DO NOT DAMAGE THE STREET FURNITURES.
11. PRIVATE ASSETS, e.g. GATES, HANDRAILS, FENCINGS, BELONGING TO THE PROPERTY OWNER SHALL BE CAREFULLY REMOVED, STORED, AND REINSTATED IF REQUIRED OR RETURNED TO THE PROPERTY OWNER.
12. CONTRACTOR TO ESTABLISH SITE BOUNDARIES, DIVERSION ROUTES AND MANAGE PUBLIC INTERFACES WITH THE WORKS.
13. REFER TO LOCATION PLAN FOR FULL EXTENTS OF COMPOUNDS AND ACCESS ROUTES.
14. WHERE POSSIBLE, THE CONTRACTOR SHOULD AVOID CLEARANCE WORKS IN VICINITY OF ROOT PROTECTION AREAS.

ISSUE/REVISION

I/R	DATE	DESCRIPTION
P01	21/11/23	100% Detailed Design
P02.1		

ISSUE PURPOSE / SUITABILITY

Initial Status or WIP

KEY PLAN



PROJECT NUMBER

60656877

SHEET TITLE

FRONTAGE 1A
SITE CLEARANCE PLAN

SHEET NUMBER

LANG-ACM-SC-F1A-DR-ZZ-011030

NOT FOR CONSTRUCTION

ISO A1 594mm x 841mm
Drawn: HR
Approved: JScott
Checked: CP
Designer: MB
C02
Project Management Initials:
Revision:

EXISTING SIGNS AND BENCHES TO BE REMOVED AND STORED SAFELY. SEE NOTE 10.

FRONTAGE 1A

EXISTING GATE ON SITE BOUNDARY. SEE NOTES 11 AND 14.

SHEET PILE WALL

EXISTING GATE ON SITE BOUNDARY. SEE NOTES 11 AND 14.

EXISTING FENCELINES ON SITE BOUNDARY. SEE NOTES 11 AND 14.

EXISTING GATE ON SITE BOUNDARY. SEE NOTES 11 AND 14.

SITE CLEARANCE TO AVOID SALTMARSH VEGETATION

REMOVAL OF EXISTING HEDGEROW AND REINSTATEMENT ON WORKS COMPLETION.

FRONTAGE 2

JAPANESE ROSE (ROSA RUGOSA). SEE NOTE 13.

EXISTING FOOTPATH TO BE BROKEN OUT.

TREE IMPLICATIONS DETERMINED WITH INPUT FROM PROJECT ARBORICULTURIST.

FRONTAGE 3

LANGSTONE ROAD

The Look Out PC

The Ship Inn (PH)

94 77 79 1 1a 50 50a

N

KEY

TREE PROTECTION ORDER:
- TPO Point - Tree
- TPO Area
- TPO Woodland

EXISTING TREE SURVEY:
- Tree Canopy
- Trees of A (high) grading
- Trees of B (moderate) grading
- Trees of C (low) grading
- Trees of U (fell) grading
- Root protection area (RPA)

FOR TREE SURVEY DETAILS REFER TO DRAWINGS 1241.BJH.01.02-SHEETS 1-4

TREE CLEARANCE:
- Trees that will be unaffected by the development proposals.
- Trees that may be retained with mitigating measures applied - Arboricultural expert supervised 'hand dig' trenching works and root severance exercise.
- Trees that would not survive the development works and will need to be removed.

SITE CLEARANCE:
- General Site Clearance
- General Vegetation Clearance
- Vegetation Clearance - Schedule 9 Plants
- Breaking Out - Structures
- Breaking Out - Footpath/Carpark Surfacing

0 6.25 12.5 m
1:250

SAFETY HEALTH AND ENVIRONMENT INFORMATION

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AECOM

PROJECT

Langstone Flood and Coastal Erosion Risk Management Scheme

CLIENT

HAVANT BOROUGH COUNCIL

CONSULTANT

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5. EXISTING PATH LEVELS VARIES ALONG DEFENCE LENGTH, AND BEACH LEVEL VARY SPATIALLY AND WITH TIME.
6. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RISK REGISTER (LANG-ACM-ZZ-ZZ-RK-ZZ-000106) FOR ANY IDENTIFIED POTENTIAL RISKS.
7. ALSO REFER TO DRAWINGS:
GENERAL ARRANGEMENT - #011201
MODEL CROSS SECTIONS - #031202 TO #031203
TYPICAL DETAILS - #051204 TO #051206

DRAWING SPECIFIC NOTES:
8. SITE CLEARANCE PLANS SHOULD BE READ IN CONJUCTION WITH THE DESIGN DRAWINGS FOR ANY SPECIFIC REQUIREMENTS FOR THE REMOVAL OF SPECIFIC STRUCTURES AND STREET FURNITURES.
9. SITE CLEARANCE PLANS SHOULD BE READ IN CONJUCTION WITH LANG-ACM-ZZ-F2-DR-ZZ-031202, AND LANG-ACM-ZZ-ZZ-DR-ZZ-031202 FOR BURIED UTILITIES.
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12. CONTRACTOR SHALL REMOVE OBSTACLES ALONG THE FORESHORE THAT PREVENT ACCESS AS REQUIRED.
13. AREAS OF INVASIVE SPECIES ARE INDICATIVE ONLY. CONTRACTOR TO UNDERTAKE SURVEYS AHEAD OF SITE CLEARANCE WORKS.
14. CONTRACTOR TO ESTABLISH SITE BOUNDARIES, DIVERSION ROUTES AND MANAGE PUBLIC INTERFACES WITH THE WORKS.
15. REFER TO LOCATION PLAN FOR FULL EXTENTS OF COMPOUNDS AND ACCESS ROUTES.
16. WHERE POSSIBLE, THE CONTRACTOR SHOULD AVOID CLEARANCE WORKS IN VICINITY OF ROOT PROTECTION AREAS.

ISSUE/REVISION

P01	21/11/23	100% Detailed Design
P02	08/02/24	100% Detailed Design
C01	08/02/24	Construction Issue
P03	28/01/25	DRAFT
C02	28/01/25	FOR PLANNING
I/R	DATE	DESCRIPTION

ISSUE PURPOSE / SUITABILITY

Detail Design Authorised/Accepted

KEY PLAN



PROJECT NUMBER

60656877

SHEET TITLE

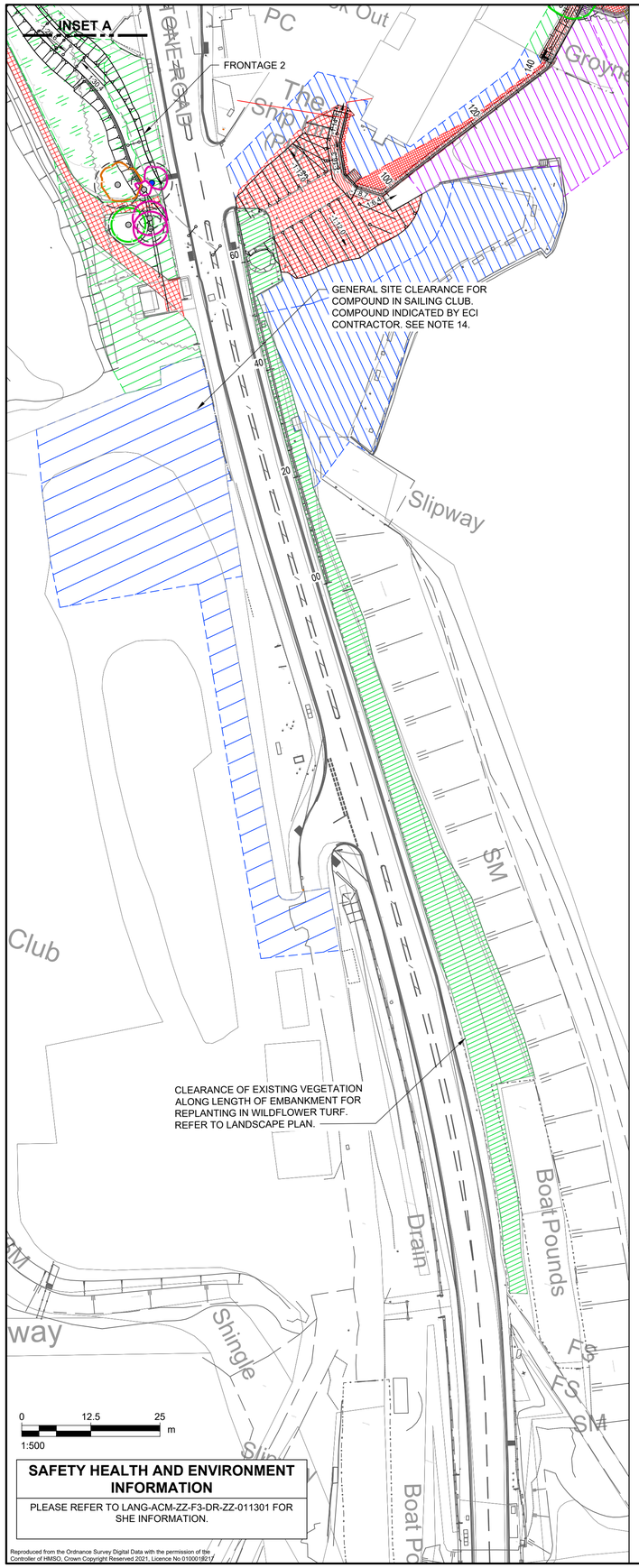
FRONTAGE 2
SITE CLEARANCE PLAN

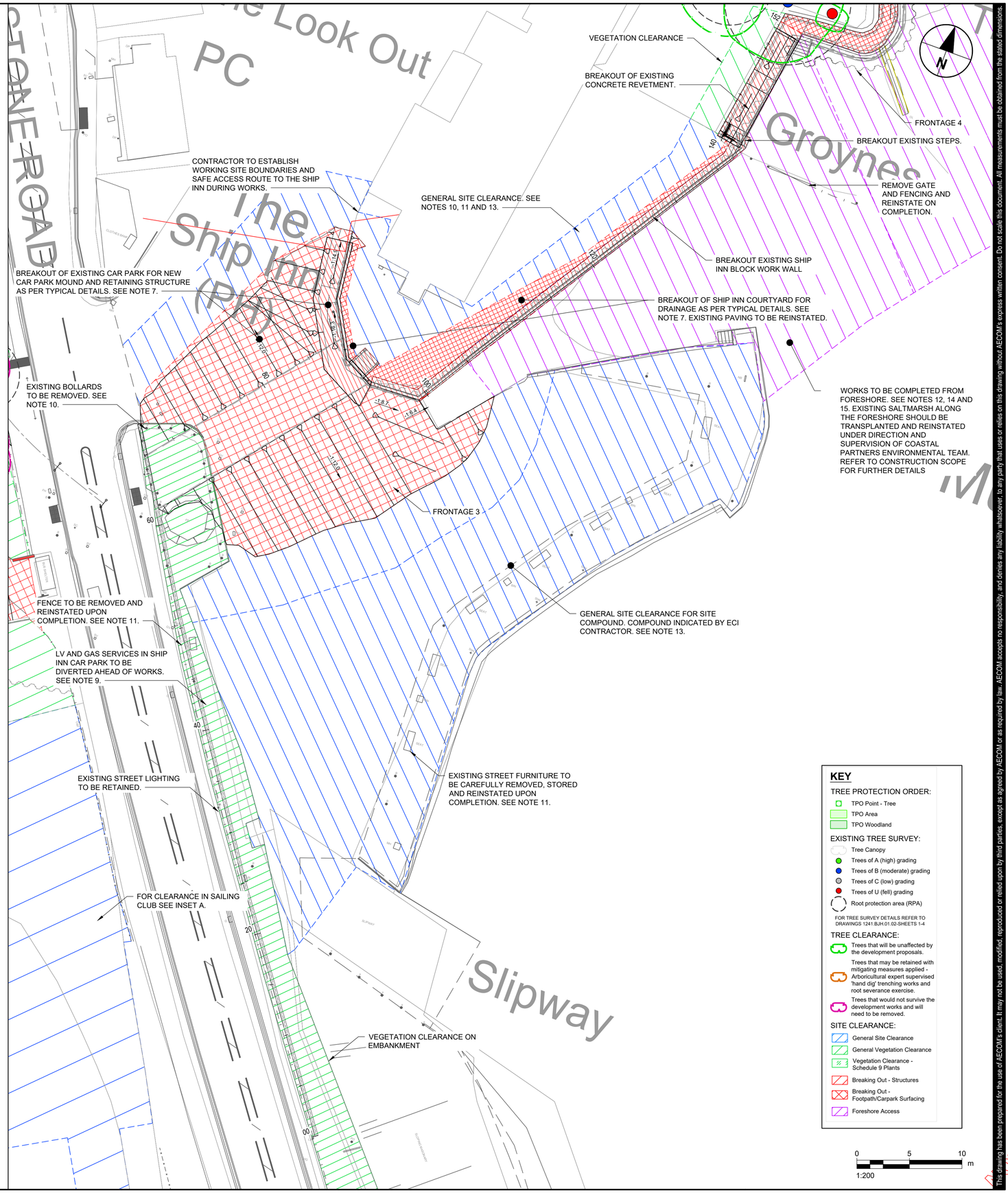
SHEET NUMBER

LANG-ACM-SC-F2-DR-ZZ-011031

NOT FOR CONSTRUCTION

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Drawn:
Approved:
Checked:
Designer: P02.1
Project Management Initials:
Revision:





KEY

TREE PROTECTION ORDER:
- TPO Point - Tree
- TPO Area
- TPO Woodland

EXISTING TREE SURVEY:
- Tree Canopy
- Trees of A (high) grading
- Trees of B (moderate) grading
- Trees of C (low) grading
- Trees of U (fell) grading
- Root protection area (RPA)

FOR TREE SURVEY DETAILS REFER TO DRAWINGS 1241.BJH.01.02-SHEETS 1-4

TREE CLEARANCE:
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SITE CLEARANCE:
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- General Vegetation Clearance
- Vegetation Clearance - Schedule 9 Plants
- Breaking Out - Structures
- Breaking Out - Footpath/Carpark Surfacing
- Foreshore Access

SAFETY HEALTH AND ENVIRONMENT INFORMATION

PLEASE REFER TO LANG-ACM-ZZ-F3-DR-ZZ-011301 FOR SHE INFORMATION.

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AECOM

PROJECT

Langstone Flood and Coastal Erosion Risk Management Scheme

CLIENT

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7. ALSO REFER TO DRAWINGS:
   GENERAL ARRANGEMENT - #011301
   MODEL CROSS SECTIONS- #031302 & #031303
   TYPICAL DETAILS - #051304 TO #051306

DRAWING SPECIFIC NOTES:
8. SITE CLEARANCE PLANS SHOULD BE READ IN CONJUCTION WITH THE DESIGN DRAWINGS FOR ANY SPECIFIC REQUIREMENTS FOR THE REMOVAL OF SPECIFIC STRUCTURES AND STREET FURNITURES.
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14. REFER TO LOCATION PLAN FOR FULL EXTENTS OF COMPOUNDS AND ACCESS ROUTES.
15. ALL ACCESS ROUTES ALONG THE FORESHORE SHALL BE KEPT TO A MINIMUM TO REDUCE IMPACT OF COMPACTION ON THE FORESHORE.

ISSUE/REVISION

P01	21/11/23	100% Detailed Design
P02.1		
I/R	DATE	DESCRIPTION

ISSUE PURPOSE / SUITABILITY

Initial Status or WIP

KEY PLAN



PROJECT NUMBER

60656877

SHEET TITLE

FRONTAGE 3
SITE CLEARANCE PLAN

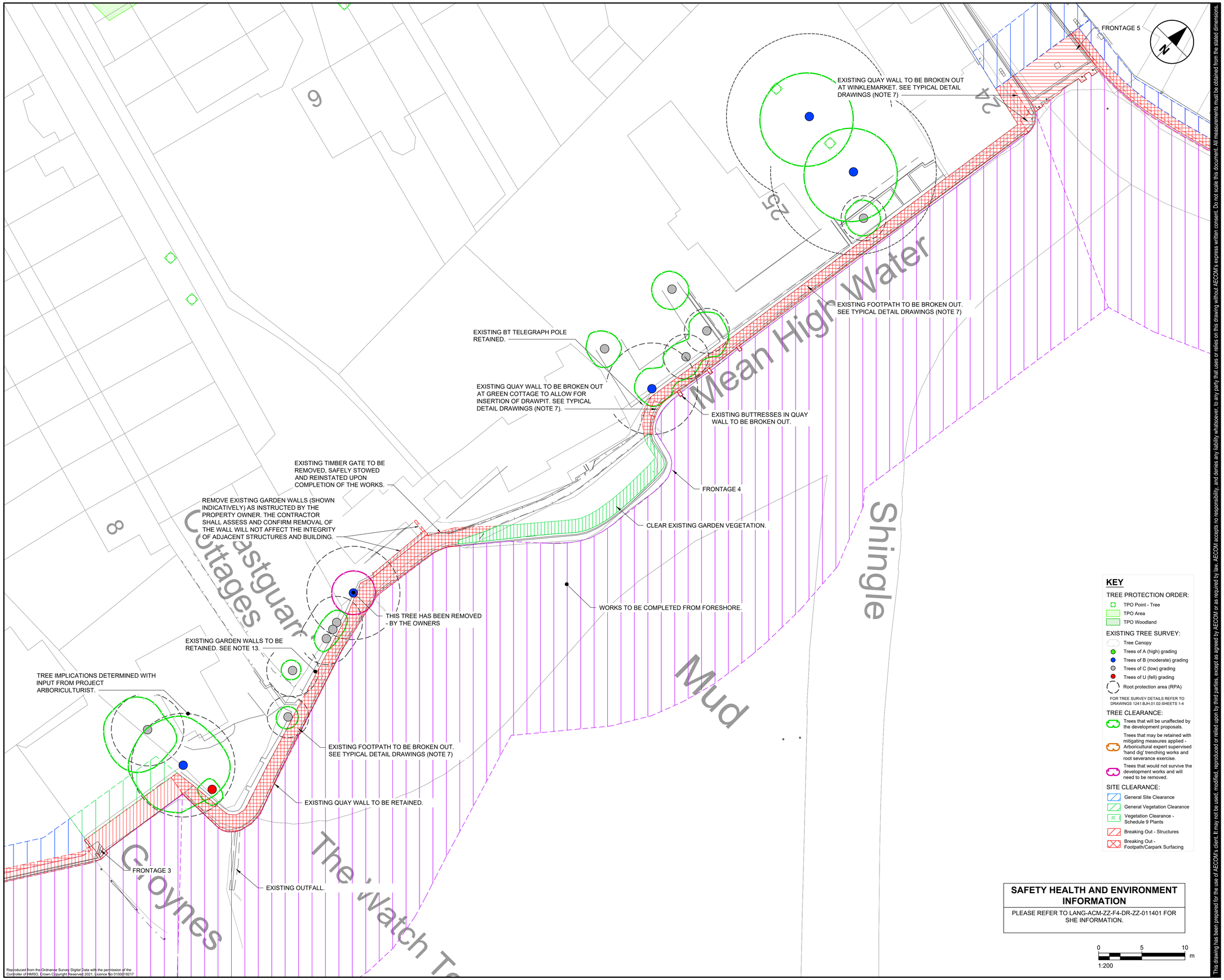
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Project Management Initials:
Revision: C02
Designer: HR
Checked: CP
Approved: JScott
Drawn: HR



KEY

TREE PROTECTION ORDER:
- TPO Point - Tree
- TPO Area
- TPO Woodland

EXISTING TREE SURVEY:
- Tree Canopy
- Trees of A (high) grading
- Trees of B (moderate) grading
- Trees of C (low) grading
- Trees of U (fell) grading
- Root protection area (RPA)

FOR TREE SURVEY DETAILS REFER TO DRAWINGS 1241-BJH.01.02-SHEETS 1-4

TREE CLEARANCE:
- Trees that will be unaffected by the development proposals.
- Trees that may be retained with mitigating measures applied - Arboricultural expert supervised 'hand dig' trenching works and root severance exercise.
- Trees that would not survive the development works and will need to be removed.

SITE CLEARANCE:
- General Site Clearance
- General Vegetation Clearance
- Vegetation Clearance - Schedule 9 Plants
- Breaking Out - Structures
- Breaking Out - Footpath/Carpark Surfacing

SAFETY HEALTH AND ENVIRONMENT INFORMATION

PLEASE REFER TO LANG-ACM-ZZ-F4-DR-ZZ-011401 FOR SHE INFORMATION.

0 5 10 m
1:200

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AECOM

PROJECT

Langstone Flood and Coastal Erosion Risk Management Scheme

CLIENT

HAVANT BOROUGH COUNCIL

CONSULTANT

Midpoint, Alençon Link,
Basingstoke, Hampshire,
RG21 7PP
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www.aecom.com

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5. EXISTING PATH LEVELS VARIES ALONG DEFENCE LENGTH, AND BEACH LEVEL VARY SPATIALLY AND WITH TIME.
6. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RISK REGISTER (LANG-ACM-ZZ-ZZ-RK-ZZ-000106) FOR ANY IDENTIFIED POTENTIAL RISKS.
7. ALSO REFER TO DRAWINGS:
   GENERAL ARRGEGEMENT - #011401
   MODEL CROSS SECTIONS - #031402
   TYPICAL DETAILS - ##1403 TO ##1412

DRAWING SPECIFIC NOTES:
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9. SITE CLEARANCE PLANS SHOULD BE READ IN CONJUCTION WITH LANG-ACM-ZZ-F4-DR-ZZ-031402 FOR BURIED UTILITIES.
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15. ALL ACCESS ROUTES ALONG THE FORESHORE SHALL BE KEPT TO A MINIMUM TO REDUCE IMPACT OF COMPACTION ON THE FORESHORE.

ISSUE/REVISION

P01	21/11/23	100% Detailed Design
P02	08/02/24	100% Detailed Design
C01	08/02/24	Construction Issue
P03	21/01/25	Design Update
C02	21/01/25	Green Cottage Update
I/R	DATE	DESCRIPTION

ISSUE PURPOSE / SUITABILITY

Detail Design Authorised/Accepted

KEY PLAN



PROJECT NUMBER

60656877

SHEET TITLE

FRONTAGE 4
SITE CLEARANCE PLAN

SHEET NUMBER

LANG-ACM-SC-F4-DR-ZZ-011033

ISO A1 594mm x 841mm
Drawn:
Approved:
Checked:
Designer: P02.1
Project Management Initials:
Revision:

KEY

TREE PROTECTION ORDER:
- TPO Point - Tree
- TPO Area
- TPO Woodland

EXISTING TREE SURVEY:
- Tree Canopy
- Trees of A (high) grading
- Trees of B (moderate) grading
- Trees of C (low) grading
- Trees of U (fell) grading
- Root protection area (RPA)

FOR TREE SURVEY DETAILS REFER TO DRAWINGS 1241.BJH.01.02-SHEETS 1-4

TREE CLEARANCE:
- Trees that will be unaffected by the development proposals.
- Trees that may be retained with mitigating measures applied - Arboricultural expert supervised 'hand dig' trenching works and root severance exercise.
- Trees that would not survive the development works and will need to be removed.

SITE CLEARANCE:
- General Site Clearance
- General Vegetation Clearance
- Vegetation Clearance - Schedule 9 Plants
- Breaking Out - Structures
- Breaking Out - Footpath/Carpark Surfacing
- Foreshore Access

PROPOSED SCHEME FOOTPRINT:
- Frontage 4
- Frontage 5

VEGETATION CLEARANCE FOR SITE COMPOUND. COMPOUND INDICATED BY THE ECI CONTRACTOR. SEE NOTES 13 AND 14.

EXISTING FIELD ACCESS TO BE USED AS ACCESS ROUTE BETWEEN FIELDS. TRIM AND WIDEN EXISTING GAP IN HEDGE AS NECESSARY.

VEGETATION CLEARANCE FOR NEW GATE

INSET A

CONTINUATION - REFER TO INSET

ALL TREES/SAPLINGS ALONGSIDE PATH WILL BE LOST

CONSTRUCTION WORKS FROM GARDEN SIDE. VEGETATION TO BE CLEARED. EXISTING GARDEN FURNITURE TO BE REMOVED AND REINSTATED FOLLOWING THE WORKS SEE NOTES 10 AND 13.

TREE IMPLICATIONS DETERMINED WITH INPUT FROM PROJECT ARBORICULTURIST.. ALL TREES/SAPLINGS ALONGSIDE PATH WILL BE LOST

CONSTRUCTION WORKS FROM MILL POND SIDE. VEGETATION TO BE CLEARED. WORKS ARE IN CLOSE PROXIMITY TO WATERCOURSE. SEE NOTE 13.

LV DIVERSION TO OCCUR PRIOR TO WORKS COMMENCING SEE NOTE 9.

BREAKOUT EXISTING SLIPWAY AND REPLACE WITH NEW REINFORCED CONCRETE SLIPWAY. SEE NOTE 8.

REMOVE EXISTING GATE AND REPLACE WITH FLOOD GATE. EXISTING PAVEMENT TO BE BROKEN OUT FOR GATE FOUNDATIONS.

POTENTIAL FOR ACCESS ROUTE TO ALLOTMENT FROM FIELD BEHIND.

CLEAR EXISTING ALLOTMENT VEGETATION

SECTION OF EXISTING ALLOTMENT WALL BROKEN OUT. REST OF ALLOTMENT WALL TO BE RETAINED. SEE TYPICAL DETAIL DRAWINGS (NOTE 7).

REMOVE EXISTING BREEZE BLOCK WALL AND REPLACE WITH FLOOD WALL. SEE TYPICAL DETAIL DRAWINGS (NOTE 7)

FRONTAGE 4

BREAKOUT EXISTING PAVEMENT FOR DRAINAGE. SEE NOTE 8. REINSTATE PAVING POST WORKS .

BREAKOUT PAVEMENT FOR GATE FOUNDATION.

GENERAL SITE CLEARANCE. SEE NOTES 10, 11 AND 13.

FRONTAGE 5

QUAY WALL TO BE RETAINED.

WORKS TO BE COMPLETED FROM FORESHORE. SEE NOTES 12, 14 AND 15. EXISTING SALTMARSH ALONG THE FORESHORE SHOULD BE TRANSPLANTED AND REINSTATED UNDER DIRECTION AND SUPERVISION OF COASTAL PARTNERS ENVIRONMENTAL TEAM. REFER TO CONSTRUCTION SCOPE FOR FURTHER DETAILS.

Langstone, The Royal Oak (PH), Shingle, 18, 21, 21a, Mill Pond

0 5 10 m
1:200

SAFETY HEALTH AND ENVIRONMENT INFORMATION

PLEASE REFER TO LANG-ACM-ZZ-F5-DR-ZZ-011501 FOR SHE INFORMATION.

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AECOM

PROJECT

Langstone Flood and Coastal Erosion Risk Management Scheme

CLIENT

HAVANT BOROUGH COUNCIL

CONSULTANT

Midpoint, Alençon Link,
Basingstoke, Hampshire,
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NOTES

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3. ALL DIMENSIONS IN MILLIMETRES, ALL CHAINAGES, LEVELS AND COORDINATES ARE IN METRES, UNLESS DEFINED OTHERWISE.
4. DEFENCE LENGTHS SHOWN ARE APPROXIMATE. THE EXACT EXTENT OF THE TYPICAL CROSS SECTION IS TO BE CONFIRMED ON SITE WITH THE SUPERVISOR.
5. EXISTING PATH LEVELS VARIES ALONG DEFENCE LENGTH, AND BEACH LEVEL VARY SPATIALLY AND WITH TIME.
6. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE RISK REGISTER (LANG-ACM-ZZ-ZZ-RK-ZZ-000001) FOR ANY IDENTIFED POTENTIAL RISKS.
7. ALSO REFER TO DRAWINGS:
   GENERAL ARRANGEMENT - #011501
   MODEL CROSS SECTIONS - #031502 AND #031503
   TYPICAL DETAILS - #051504 TO #051506
   DRAINAGE DETAILS - ##1051 TO ##1054

DRAWING SPECIFIC NOTES:
8. SITE CLEARANCE PLANS SHOULD BE READ IN CONJUCTION WITH THE DESIGN DRAWINGS FOR ANY SPECIFIC REQUIREMENTS FOR THE REMOVAL OF SPECIFIC STRUCTURES AND STREET FURNITURES.
9. SITE CLEARANCE PLANS SHOULD BE READ IN CONJUCTION WITH LANG-ACM-ZZ-F5-DR-ZZ-031502 AND #031503 FOR BURIED UTILITIES.
10. CONTRACTOR SHOULD REMOVE STREET FURNITURES, INCLUDING SIGNAGE, AS NECESSARY TO CONTRACTOR METHODOLOGY. IF REMOVAL REQUIRED, IT SHALL BE CAREFULLY REMOVED STORED AND REINSTATED ON COMPLETION.IF REMOVAL NOT REQUIRED, THE CONTRACTOR SHOULD TAKE NECESSARY PRECAUTIONS TO ENSURE CONSTRUCTION WORKS DO NOT DAMAGE THE STREET FURNITURES.
11. PRIVATE ASSETS, e.g. GATES, HANDRAILS, FENCINGS, BELONGING TO THE PROPERTY OWNER SHALL BE CAREFULLY REMOVED, STORED, AND REINSTATED IF REQUIRED OR RETURNED TO THE PROPERTY OWNER.
12. CONTRACTOR SHALL REMOVE OBSTACLES ALONG THE FORESHORE THAT PREVENT ACCESS AS REQUIRED.
13. CONTRACTOR TO ESTABLISH SITE BOUNDARIES, DIVERSION ROUTES AND MANAGE PUBLIC INTERFACES WITH THE WORKS.
14. REFER TO LOCATION PLAN FOR FULL EXTENTS OF COMPOUNDS AND ACCESS ROUTES.
15. ALL ACCESS ROUTES ALONG THE FORESHORE SHALL BE KEPT TO A MINIMUM TO REDUCE IMPACT OF COMPACTION ON THE FORESHORE.

ISSUE/REVISION

P01	21/11/23	100% Detailed Design
P02.1		
I/R	DATE	DESCRIPTION

ISSUE PURPOSE / SUITABILITY

Initial Status or WIP

KEY PLAN



PROJECT NUMBER

60656877

SHEET TITLE

FRONTAGE 5
SITE CLEARANCE PLAN

SHEET NUMBER

LANG-ACM-SC-F5-DR-ZZ-011034

NOT FOR CONSTRUCTION

Annex F- Photosheets



AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	4.8m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 1
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	South west				
Date / Time:	21/09/2022, 08:58	Location:	E472677 N105201				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	4.8m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 1
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	South west				
Date / Time:	21/09/2022, 08:58	Location:	E472677 N105201				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	4.3m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 2
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	North west				
Date / Time:	29/09/2022, 11:37	Location:	E472478 N104160				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	4.3m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 2
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	North west				
Date / Time:	29/09/2022, 11:37	Location:	E472478 N104160				

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Extent of 50mm single frame image

50° 45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	2.6m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 3
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	North west				
Date / Time:	21/09/2022, 11:10	Location:	E472000 N104777				

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Extent of 50mm single frame image

50° 45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	2.6m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 3
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	North west				
Date / Time:	21/09/2022, 11:10	Location:	E472000 N104777				

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Extent of 50mm single frame image

55° 50° 45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	2.8m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 4
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	West				
Date / Time:	07/10/2022, 08:06	Location:	E471978 N104942				

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Extent of 50mm single frame image

55° 50° 45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	2.8m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 4
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	West				
Date / Time:	07/10/2022, 08:06	Location:	E471978 N104942				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	6.6m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 5
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	North				
Date / Time:	29/09/2022, 10:17	Location:	E471987 N104499				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	6.6m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 5
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	North				
Date / Time:	29/09/2022, 10:17	Location:	E471987 N104499				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Sony ILCE-7RM4	Eye level:	4.7m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Sony 24-70mm f/2.8	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 6
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	North east				
Date / Time:	26/09/2023, 10:33	Location:	E471914, N104969				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Sony ILCE-7RM4	Eye level:	4.7m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Sony 24-70mm f/2.8	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 6
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	North east				
Date / Time:	26/09/2023, 10:33	Location:	E471914, N104969				

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Extent of 50mm single frame image

50° 45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	3.2m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 7
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	South west				
Date / Time:	21/09/2022, 09:52	Location:	E471931 N104889				

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Extent of 50mm single frame image

50° 45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	3.2m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 7
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	South west				
Date / Time:	21/09/2022, 09:52	Location:	E471931 N104889				

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EXISTING - FIT TO PAGE

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Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	4.2m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 8
Enlargement Factor:	N/A	Horizontal Field of View:	120°				
Paper Size:	A1	Direction of View:	North				
Date / Time:	29/09/2022, 09:20	Location:	E471895 N104674				

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AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	4.2m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 8
Enlargement Factor:	N/A	Horizontal Field of View:	120°				
Paper Size:	A1	Direction of View:	North				
Date / Time:	29/09/2022, 09:20	Location:	E471895 N104674				

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EXISTING

Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	4.2m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 8
Enlargement Factor:	96%	Horizontal Field of View:	120°				
Paper Size:	A1	Direction of View:	North				
Date / Time:	29/09/2022, 09:20	Location:	E471895 N104674				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	4.2m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 8
Enlargement Factor:	96%	Horizontal Field of View:	120°				
Paper Size:	A1	Direction of View:	North				
Date / Time:	29/09/2022, 09:20	Location:	E471895 N104674				

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PROPOSED

Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	4.2m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 8
Enlargement Factor:	96%	Horizontal Field of View:	120°				
Paper Size:	A1	Direction of View:	North				
Date / Time:	29/09/2022, 09:20	Location:	E471895 N104674				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	4.2m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 8
Enlargement Factor:	96%	Horizontal Field of View:	120°				
Paper Size:	A1	Direction of View:	North				
Date / Time:	29/09/2022, 09:20	Location:	E471895 N104674				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	3.3m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 9
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	North west				
Date / Time:	21/09/2022, 10:17	Location:	E471907 N104786				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	3.3m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 9
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	North west				
Date / Time:	21/09/2022, 10:17	Location:	E471907 N104786				

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EXISTING

Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	4.5m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 10
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	East				
Date / Time:	21/09/2022, 09:32	Location:	E471831 N104905				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	4.5m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 10
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	East				
Date / Time:	21/09/2022, 09:32	Location:	E471831 N104905				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	5.1m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 11
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	South east				
Date / Time:	29/09/2022, 10:50	Location:	E471757 N104759				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	5.1m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 11
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	South east				
Date / Time:	29/09/2022, 10:50	Location:	E471757 N104759				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	4.5m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 12
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	North east				
Date / Time:	29/09/2022, 11:15	Location:	E471538 N104756				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	4.5m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 12
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	North east				
Date / Time:	29/09/2022, 11:15	Location:	E471538 N104756				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	8.5m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 13
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	South west				
Date / Time:	21/09/2022, 08:33	Location:	E472858 N105371				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	4	Camera:	Canon EOS 5D	Eye level:	8.5m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 13
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	South west				
Date / Time:	21/09/2022, 08:33	Location:	E472858 N105371				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	3	Camera:	Canon EOS 5D	Eye level:	5m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 14
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	South				
Date / Time:	29/09/2022, 08:59	Location:	E471654 N104943				

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Extent of 50mm single frame image

45° 40° 35° 30° 25° 20° 15° 10° 5° 0° 5° 10° 15° 20° 25° 30° 35° 40° 45°

AECOM Delivering a better world

Visualisation Type:	3	Camera:	Canon EOS 5D	Eye level:	5m	**Note:**	Langstone Coastal Defense
Projection:	Cylindrical	Lens:	Canon EF50mm f/1.8 STM	Height of Camera:	1.6m	Images to be viewed at a comfortable arm's length.	Viewpoint 14
Enlargement Factor:	96%	Horizontal Field of View:	90°				
Paper Size:	A1	Direction of View:	South				
Date / Time:	29/09/2022, 08:59	Location:	E471654 N104943				

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AECOM is the world's premier infrastructure consulting firm, delivering professional services throughout the project lifecycle – from planning, design and engineering to program and construction management. We partner with our clients in the public and private sectors to solve their most complex challenges and build legacies for generations to come. On projects spanning transportation, buildings, water, governments, energy and the environment, our teams are driven by a common purpose to deliver a better world. AECOM is a Fortune 500 firm and its Professional Services business had a revenue of approximately $13.6 billion in fiscal year 2019. See how we deliver what others can only imagine at aecom.com and @AECOM.

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