ISO A1 594mm x 841mm
ALL DIMENSIONS IN MILLIMETRES UNLESS STATED OTHERWISE

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



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AECOM

PROJECT

Langstone Flood and Coastal Erosion Risk Management Scheme

CLIENT

HAVANT BOROUGH COUNCIL

CONSULTANT

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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 DRM (LANG-ACM-ZZ-ZZ-RK-ZZ-000106) FOR ANY IDENTIFIED POTENTIAL RISKS.
7. ALSO REFER TO DRAWINGS: ALL SCHEME DRAWINGS

DRAWING SPECIFIC NOTES
8. DEFENCE ALIGNMENT DRAWN USING A COMBINATION OF TOPOGRPHICAL SURVEY DATA PROVIDED BY COASTAL PARTNERS.
9. IDENTIFY ALL EXISTING DRAINAGE ACROSS FLOOD DEFENCE ALIGNMENT AND SEAL OR PROVIDE FLAP VALVES TO ENSURE DRAINAGE IS MAINTAINED.
10. REFER TO DEFENCE TYPICAL CROSS SECTIONS FOR DETAILS.
11. CONSTRUCTION WORKS ARE TO BE PAUSED OVER WINTER PERIODS. CONTRACTOR TO ENSURE STABILITY OF STRUCTURES AND CONTINUITY OF FLOOD DEFENCES OVER PERIODS WHERE WORK IS PAUSED, e.g BY PROVIDING TEMPORARY FLOOD BARRIERS.

LEGEND

PROPOSED SCHEME FOOTPRINT:
- Frontage 1A
- Frontage 2
- Frontage 3
- Frontage 4
- 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	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

COMPLETE SITE GENERAL ARRANGEMENT PLAN

SHEET NUMBER

LANG-ACM-ZZ-ZZ-DR-ZZ-011000

NOT FOR CONSTRUCTION

ISO A1 594mm x 841mm
Drawn: KG
Approved: JScott
Checked: CP
Designer: HR
C01
Project Management Initials:
Revision:

START OF PROPOSED 3m WIDE CYCLEPATH TO TIE-IN WITH EXISTING GROUND AT CH 0

R01

F1A-1 F1A-2 F1A-3 F1A-4 F1A-5 F1A-6 F1A-7 F1A-8 F1A-9 F1A-10 F1A-11 F1A-12 F1A-13 F1A-14 F1A-15 F1A-16 F1A-17 F1A-18 F1A-19 F1A-20

E02 R05 E01 R06 R09 R02 R07 R08 R13

REFER TO LANG-ACM-SC-F1A-DR-ZZ-011030 FOR SITE CLEARANCE PLAN WITH TREE REMOVAL IMPLICATIONS

NEW FLOOD EMBANKMENT WITH CYCLE PATH ON TOP OF EMBANKMENT. REFER TO LANG-ACM-ZZ-F1A-DR-ZZ-011103 FOR TYPICAL DETAILS.

FRONTAGE 1A

REFER TO LANDSCAPE PLAN - LANG-ACM-LS-F1A-DR-LA-011020 FOR DETAILS ON REINSTATEMENT.

EXISTING FOOTPATH WIDENED TO 3m CYCLEPATH FROM CENTRELINE

FRONTAGE 2

PROPOSED 3m WIDE CYCLEPATH TO TRANSITION INTO FRONTAGE 2

0 6.25 12.5 m
1:250

SETTING OUT POINTS NATIONAL GRID (OSGB36)

POINT ID	EASTING (m)	NORTHING (m)
F1A-1	471650.363	104969.110
F1A-2	471651.164	104959.145
F1A-3	471652.573	104949.250
F1A-4	471654.392	104939.417
F1A-5	471656.314	104929.605
F1A-6	471658.572	104919.864
F1A-7	471661.327	104910.253
F1A-8	471664.347	104900.725
F1A-9	471668.151	104891.478
F1A-10	471672.391	104882.427
F1A-11	471676.930	104873.517
F1A-12	471681.498	104864.623
F1A-13	471686.552	104855.995
F1A-14	471691.422	104847.264
F1A-15	471695.602	104838.182
F1A-16	471700.384	104829.408
F1A-17	471706.532	104821.573
F1A-18	471713.587	104814.495
F1A-19	471721.043	104807.832
F1A-20	471726.726	104802.481

SAFETY HEALTH AND ENVIRONMENT INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following risks and information.

Risks listed here are not exhaustive.
Refer to CDM Risk Assessment Register No. LANG-ACM-ZZ-ZZ-RK-ZZ-000006.
The table includes the residual risks associated with Frontage 1A with reference to the Risk Register included in brackets.

CONSTRUCTION

R1. Public Access and Egress (F1A C1)
R2. Working in Proximity to Existing and Abandoned Services (F1A C2) including:
- Portsmouth Water Main Trunk
- Southern Water Storm Water Drain
- Southern Water Foul Water Trunk
- BT Openreach Overhead Telecoms
- BT Openreach Ducted Underground Telecoms
- SSEN LV Cable
- SGN Gas Pipe
- Abandoned HV Cables

R3. Encountering Unidentified Utilities (F1A C6)
R4. Encountering Unexploded Ordnance (F1A C3)
R5. Working in Proximity to Existing Trees (F1A C4)
R6. Works in Close Proximity to Residential Properties (F1A C5)
R7. Encountering Unexpected Ground Conditions (F1A C7)
R8. Construction Impacting Archaeology (F1A C8)
R9. Excavation Seepage or Inflow (F1A C9)
R10. Pausing of Works over Winter Periods (F1A C13)

OPERATIONS

O1. Access to Existing Services (F1A O1)
O2. Compromise of Flood Defence (F1A O3, O4)
O3. Seepage beneath the Embankment (F1A O5)

MAINTENANCE

M1. Maintenance Activities on Embankment Slope (F1A O2)

DEMOLITION

D1. Working in Proximity to Existing and Abandoned Services during Demolition Works.

ENVIRONMENT

E1. Working in Proximity to Existing Trees (F1A C4)
E2. Possible contaminated. Hydrocarbon odour encountered during ground investigation (F1A C12)

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement

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AECOM

PROJECT

Langstone Flood and Coastal Erosion Risk Management Scheme

CLIENT

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6. THIS DRAWING IS TO BE READ IN CONJUNCTION WITH DRM (LANG-ACM-ZZ-ZZ-RK-ZZ-000106) FOR ANY IDENTIFIED POTENTIAL RISKS.
7. ALSO REFER TO DRAWINGS:
   GENERAL ARRANGEMENT - #011101
   MODEL CROSS SECTIONS - #031102

DRAWING SPECIFIC NOTES
8. DEFENCE ALIGNMENT HAS BEEN DETERMINED FROM TOPOGRAPHICAL SURVEY AND LASER SCAN DATA PROVIDED BY COASTAL PARTNERS.
9. ALL EXISTING SERVICES ARE TO BE IDENTIFIED PRIOR TO WORKS COMMENCING.
10. CONSTRUCTION WORKS ARE TO BE PAUSED OVER WINTER PERIODS. CONTRACTOR TO ENSURE STABILITY OF STRUCTURES AND CONTINUITY OF FLOOD DEFENCES OVER PERIODS WHERE WORK IS PAUSED, e.g BY PROVIDING TEMPORARY FLOOD BARRIERS.

LEGEND

PROPOSED SCHEME FOOTPRINT:
- Frontage 1A
- Frontage 2

ISSUE/REVISION

P01	21/11/23	100% Detailed Design
P02	08/02/24	100% Detailed Design
C01	08/02/24	Construction Issue
I/R	DATE	DESCRIPTION

ISSUE PURPOSE / SUITABILITY

Detail Design Authorised/Accepted

KEY PLAN



PROJECT NUMBER

60656877

SHEET TITLE

FRONTAGE 1A
GENERAL ARRANGEMENT

SHEET NUMBER

LANG-ACM-ZZ-F1A-DR-ZZ-011101

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

EARTH EMBANKMENT AT CROSS OVER ABOVE SOUTHERN WATER ASSET. SEE DRAWING LANG-ACM-ZZ-F2-DR-ZZ-051204.

FRONTAGE 1A

PROPOSED 3m WIDE CYCLEPATH TO TRANSITION FROM FRONTAGE 1A

REFER TO LANG-ACM-SC-F2-DR-ZZ-011031 FOR SITE CLEARANCE PLAN WITH TREE IMPLICATIONS

EXISTING FOOTPATH TO BE WIDENED TO 3M FROM CURRENT FOOTPATH SEAWARD EDGE. SEE DRAWING LANG-ACM-ZZ-F2-DR-ZZ-051204.

SHEET PILE WALL ON SEAWARDS SIDE OF CYCLEPATH. SHEET PILE WALL TO BE BURIED. SEE DRAWING LANG-ACM-ZZ-F2-DR-ZZ-051204.

FILTER DRAIN ON SEAWARDS SIDE OF PATH. REFER TO LANG-ACM-SW-F2-DR-ZZ-011041.

SHEET PILE WALL ON LANDWARDS SIDE OF CYCLEPATH. SHEET PILE BURIED ON SEAWARDS SIDE OF THE PILE UP TO CHAINAGE 109. SEE DRAWING LANG-ACM-ZZ-F2-DR-ZZ-051204

REFER TO LANDSCAPE PLAN - LANG-ACM-LS-F2-DR-LA-011021 FOR DETAILS ON REINSTATEMENT.

FILTER DRAIN ON LANDWARDS SIDE OF PILE REFER TO LANG-ACM-SW-F2-DR-ZZ-011041.

EARTH EMBANKMENT AND RAISED CYCLEPATH AT CROSS OVER ABOVE PORTSMOUTH WATER ASSET. SEE DRAWING LANG-ACM-ZZ-F2-DR-ZZ-051205.

SHEET PILE WALL ON LANDWARDS SIDE OF CYCLEPATH. SHEET PILE WALL TO BE CLADDED ON SEAWARDS SIDE OF PILE. SEE DRAWING LANG-ACM-ZZ-F2-DR-ZZ-051204.

FOOTPATH TO BE BROUGHT IN LAND FROM CHAINAGE 100.00

FRONTAGE 2

CYCLE PATH RAISED OVER SHEET PILE WALL, SEE DRAWING LANG-ACM-ZZ-F2-DR-ZZ-051205.

FRONTAGE 3

FILTER DRAIN ON SEAWARDS SIDE OF PILE REFER TO LANG-ACM-SW-F2-DR-ZZ-011041.

SHEET PILE WALL ON SEAWARDS SIDE OF CYCLEPATH. SHEET PILE WALL TO BE CLADDED ON BOTH SIDES OF PILE. SEE DRAWING LANG-ACM-ZZ-F2-DR-ZZ-051206.

EXISTING EARTH BUND

CYCLEPATH TO TIE INTO EXISTING FOOTPATH LEVELS

2M WIDE SECTION OF CYCLEPATH TO RUN BEHIND THE EXISTING BUS STOP. CYCLEPATH TO TIE IN WITH EXISTING PAVEMENT LEVELS.

R01 R02 R03 R04 R05 R06 R07 R08 E01 E02

0 6.25 12.5 m
1:250

SETTING OUT POINTS NATIONAL GRID (OSGB36)

POINT ID	EASTING (m)	NORTHING (m)
F2-1	471725.980	104803.202
F2-2	471727.780	104801.312
F2-3	471737.531	104789.216
F2-4	471741.424	104784.292
F2-5	471746.230	104777.049
F2-6	471747.844	104774.217
F2-7	471748.356	104773.342
F2-8	471766.465	104752.933
F2-9	471768.944	104751.052
F2-10	471774.793	104746.616
F2-11	471778.338	104744.285
F2-12	471789.682	104737.878
F2-13	471812.894	104724.769
F2-14	471816.871	104722.907
F2-15	471818.381	104722.336
F2-16	471821.392	104721.198
F2-17	471835.482	104710.591
F2-18	471842.073	104703.951
F2-19	471852.870	104684.805
F2-20	471761.796	104750.252
F2-21	471764.882	104761.207
F2-22	471702.953	104789.567
F2-23	471707.754	104802.043
F2-24	471707.330	104799.506
F2-25	471719.860	104801.323
F2-29	471718.286	104803.671
F2-30	471739.630	104777.708
F2-31	471747.102	104767.577
F2-32	471755.286	104756.315
F2-33	471781.988	104745.365
F2-34	471780.473	104746.329
F2-35	471790.145	104740.373
F2-36	471818.191	104724.584
F2-37	471840.981	104686.345
F2-38	471849.067	104677.835
F2-39	471859.533	104679.587

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SAFETY HEALTH AND ENVIRONMENT INFORMATION

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Risks listed here are not exhaustive.
Refer to CDM Risk Assessment Register No. LANG-ACM-ZZ-ZZ-RK-ZZ-000106.
The table includes significant risks associated with Frontage 2 with reference to the Risk Register included in brackets.

CONSTRUCTION

R1. Public Access and Egress (F2 C1)
R2. Working in Proximity to Existing and Abandoned Services (F2 C2) including:
- Portsmouth Water Main Trunk (Vibration Sensitive)
- Southern Water Storm Water Drain (Vibration Sensitive)
- Abandoned HV Cables

R3. Encountering Unidentified Utilities
R4. Encountering Unexploded Ordnance (F2 C4)
R5. Works in Close Proximity to Residential Properties (F2 C5)
R6. Working Near Water (F2 C6, C7, C8)
R7. Restricted Tidal Access (F2 C6)
R8. Pausing of Works over Winter Periods (F2 C8)

OPERATIONS

O1. Access to Existing Services
O2. Compromise of Flood Defence
O3. Falls from Height
O4. Overtopping
O5. Localised seepage at interface to services
O6. Blockage of surface water drainage.

MAINTENANCE

M1. Maintenance of seawards side of defence

DEMOLITION

D1. Working in Proximity to Existing and Abandoned Services during Demolition Works.

ENVIRONMENT

E1. Working in Proximity to Designated Saltmarsh (F2 C4)
E2. Invasive Species (Japanese Rose - *Rosa rugosa*) (F2 C4)

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement

AECOM

PROJECT

Langstone Flood and Coastal Erosion Risk Management Scheme

CLIENT

HAVANT BOROUGH COUNCIL

CONSULTANT

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7. ALSO REFER TO DRAWINGS:
MODEL CROSS SECTIONS - #031202 AND #031203.
TYPICAL DETAILS - #051204 TO #051206.
DRAINAGE - ##1041 TO ##1043

DRAWING SPECIFIC NOTES
8. DEFENCE ALIGNMENT DETERMINED FROM TOPOGRAPHICAL SURVEY AND LASER SCAN DATA PROVIDED BY COASTAL PARTNERS.
9. IDENTIFY ALL EXISTING DRAINAGE ACROSS FLOOD DEFENCE ALIGNMENT AND MAINTAIN OR PROVIDE FLAP VALVES TO ENSURE DRAINAGE IS MAINTAINED.
10. FORESHORE ENCROACHMENT DETERMINED USING SHAPEFILES PROVIDED BY COASTAL PARTNERS.
11. REFER TO SITE CLEARANCE PLAN FOR EXTENTS OF JAPANESE ROSE (*ROSA RUGOSA*)
12. CONSTRUCTION WORKS ARE TO BE PAUSED OVER WINTER PERIODS. CONTRACTOR TO ENSURE STABILITY OF STRUCTURES AND CONTINUITY OF FLOOD DEFENCES OVER PERIODS WHERE WORK IS PAUSED, e.g BY PROVIDING TEMPORARY FLOOD BARRIERS.

LEGEND

PROPOSED SCHEME FOOTPRINT:
- Frontage 1A
- Frontage 2
- Frontage 3

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
GENERAL ARRANGEMENT

SHEET NUMBER

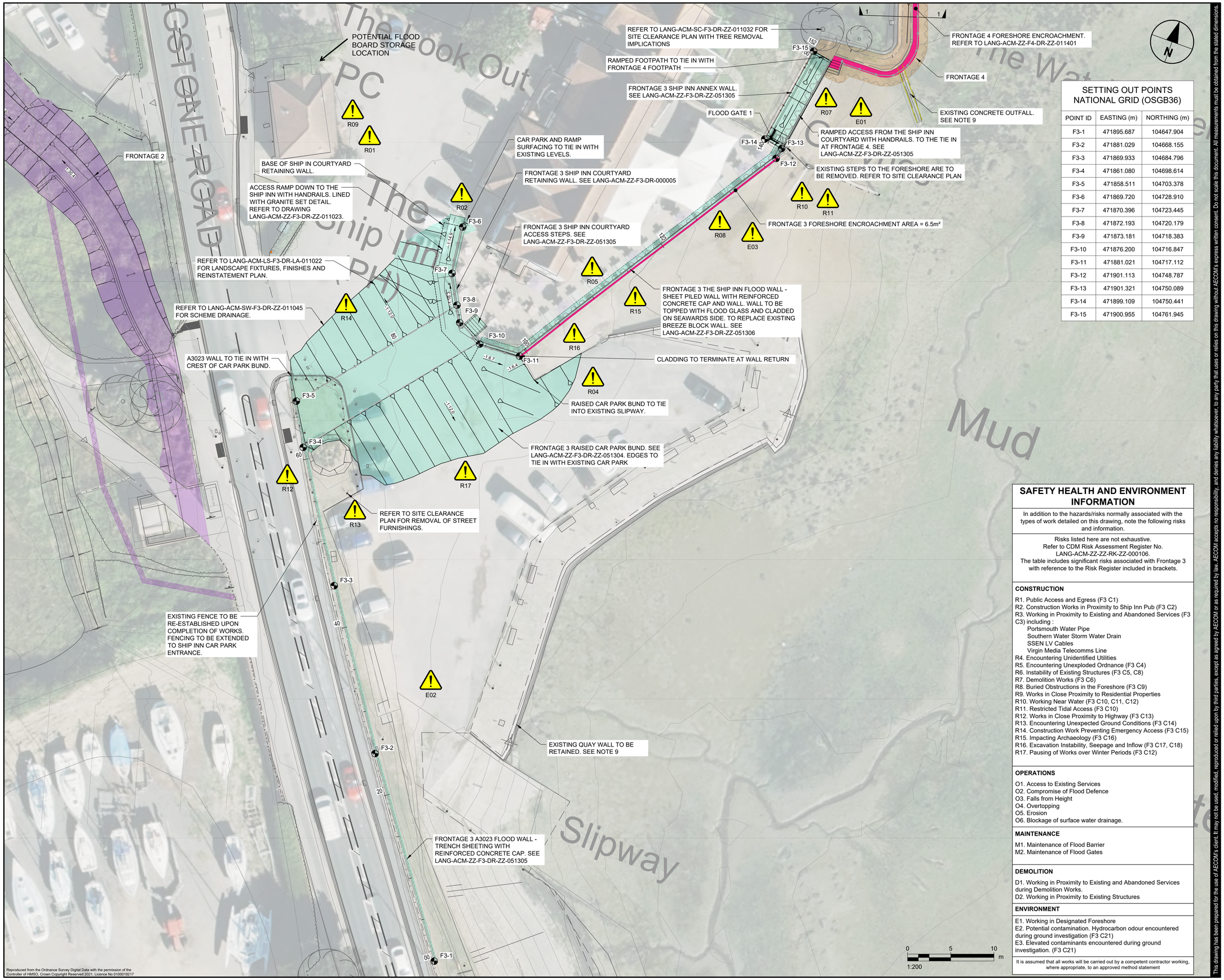
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ISO A1 594mm x 841mm
Project Management Initials:
Designer: HR
Revision: C01
Checked: CP
Approved: JScott
Drawn: KG



SETTING OUT POINTS NATIONAL GRID (OSGB36)		
POINT ID	EASTING (m)	NORTHING (m)
F3-1	471895.687	104647.904
F3-2	471881.029	104668.155
F3-3	471869.933	104684.796
F3-4	471861.080	104698.614
F3-5	471858.511	104703.378
F3-6	471869.720	104728.910
F3-7	471870.396	104723.445
F3-8	471872.193	104720.179
F3-9	471873.181	104718.383
F3-10	471876.200	104716.847
F3-11	471881.021	104717.112
F3-12	471901.113	104748.787
F3-13	471901.321	104750.089
F3-14	471899.109	104750.441
F3-15	471900.955	104761.945

SAFETY HEALTH AND ENVIRONMENT INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following risks and information.

Risks listed here are not exhaustive.
Refer to CDM Risk Assessment Register No. LANG-ACM-ZZ-ZZ-RK-ZZ-000106.
The table includes significant risks associated with Frontage 3 with reference to the Risk Register included in brackets.

CONSTRUCTION

R1. Public Access and Egress (F3 C1)
R2. Construction Works in Proximity to Ship Inn Pub (F3 C2)
R3. Working in Proximity to Existing and Abandoned Services (F3 C3) including :
- Portsmouth Water Pipe
- Southern Water Storm Water Drain
- SSEN LV Cables
- Virgin Media Telecomms Line

R4. Encountering Unidentified Utilities
R5. Encountering Unexploded Ordnance (F3 C4)
R6. Instability of Existing Structures (F3 C5, C8)
R7. Demolition Works (F3 C6)
R8. Buried Obstructions in the Foreshore (F3 C9)
R9. Works in Close Proximity to Residential Properties
R10. Working Near Water (F3 C10, C11, C12)
R11. Restricted Tidal Access (F3 C10)
R12. Works in Close Proximity to Highway (F3 C13)
R13. Encountering Unexpected Ground Conditions (F3 C14)
R14. Construction Work Preventing Emergency Access (F3 C15)
R15. Impacting Archaeology (F3 C16)
R16. Excavation Instability, Seepage and Inflow (F3 C17, C18)
R17. Pausing of Works over Winter Periods (F3 C12)

OPERATIONS

O1. Access to Existing Services
O2. Compromise of Flood Defence
O3. Falls from Height
O4. Overtopping
O5. Erosion
O6. Blockage of surface water drainage.

MAINTENANCE

M1. Maintenance of Flood Barrier
M2. Maintenance of Flood Gates

DEMOLITION

D1. Working in Proximity to Existing and Abandoned Services during Demolition Works.
D2. Working in Proximity to Existing Structures

ENVIRONMENT

E1. Working in Designated Foreshore
E2. Potential contamination. Hydrocarbon odour encountered during ground investigation (F3 C21)
E3. Elevated contaminants encountered during ground investigation. (F3 C21)

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement

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Langstone Flood and Coastal Erosion Risk Management Scheme

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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:
MODEL CROSS SECTIONS - #031302 AND #031303
TYPICAL DETAILS - #051304 TO #051306
REBAR DETAILS - #081930 - ##

DRAWING SPECIFIC NOTES
8. DEFENCE ALIGNMENT HAS BEEN DETERMINED FROM TOPOGRAPHICAL SURVEY AND LASER SCAN DATA PROVIDED BY COASTAL PARTNERS.
9. ALL EXISTING LAND DRAINAGE OUTFALLS SHALL BE IDENTIFIED PRIOR TO WORKS COMMENCING. OUTFALLS SHALL BE MAINTAINED OR PROVIDED WITH A FLAP VALVE TO ENSURE THAT CONTINUITY OF THE FLOOD DEFENCES IS MAINTAINED. REFER TO DRAWING #011044 FOR DETAILS. CONTRACTOR TO INSPECT AND DETERMINE CONDITION OF EXISTING OUTFALLS. DAMAGED PIPES TO BE REPLACED.
10. ALL EXISTING SERVICES ARE TO BE IDENTIFIED PRIOR TO WORKS COMMENCING. SERVICE INFORMATION IS SHOWN ON LANG-ACM-ZZ-F3-DR-ZZ-031302 AND #031303.
11. CONSTRUCTION WORKS ARE TO BE PAUSED OVER WINTER PERIODS. CONTRACTOR TO ENSURE STABILITY OF STRUCTURES AND CONTINUITY OF FLOOD DEFENCES OVER PERIODS WHERE WORK IS PAUSED, e.g BY PROVIDING TEMPORARY FLOOD BARRIERS.

LEGEND

PROPOSED SCHEME FOOTPRINT:
- Frontage 2
- Frontage 3
- Frontage 4
- Foreshore Encroachment Area

ISSUE/REVISION

P01	21/11/23	100% Detailed Design
P02	08/02/24	100% Detailed Design
C01	08/02/24	Construction Issue
I/R	DATE	DESCRIPTION

ISSUE PURPOSE / SUITABILITY

Detail Design Authorised/Accepted

KEY PLAN



PROJECT NUMBER

60656877

SHEET TITLE

FRONTAGE 3
GENERAL ARRANGEMENT

SHEET NUMBER

LANG-ACM-ZZ-F3-DR-ZZ-011301

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

SAFETY HEALTH AND ENVIRONMENT INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following risks and information.

Risks listed here are not exhaustive.
Refer to CDM Risk Assessment Register No.
LANG-ACM-ZZ-ZZ-RK-ZZ-000106.
The table includes significant risks associated with Frontage 4 with reference to the Risk Register included in brackets.

CONSTRUCTION

R1. Public Access and Egress (F4 C1, F4 C9)
R2. Working in Proximity to Existing and Abandoned Services (F4 C11, C13) including :
- SSEN LV Cables
- BT Openreach Undergound Telecomms
- BT Openreach Overhead Telecomms

R3. Encountering Unidentified Utilities
R4. Encountering Unexploded Ordnance
R5. Instability of Existing Structures (F4 C5, C8, C27)
R6. Buried Obstructions in the Foreshore (F4 C5, C6)
R7. Restricted Access to Landwards Side of Proposed Defence (F4 C8)
R8. Works in Close Proximity to Residential Properties (F4 C17)
R9. Works in Close Proximity to Trees (F4 C7) .
R10. Working Near Water (F4 C18, C19, C20)
R11. Restricted Tidal Access with Potential for Soft Foreshore(F3 C10)
R12. Telegraph Pole Stability (F4 C21)
R13. Encountering Unexpected Ground Conditions (F4 C22)
R14. Impact on Archaeology (F4 C25)
R15. Installation of Sheet Piles (F4 C24)
R16. Pausing of Works over Winter Periods (F4 C20)

OPERATIONS

O1. Access to Existing Services
O2. Compromise of Flood Defence
O3. Falls from Height
O4. Overtopping
O5. Serviceability of property wall
O6. Reduced Accessibility
O7. Blockage of surface water drainage.

MAINTENANCE

M1. Maintenance of Flood Gates

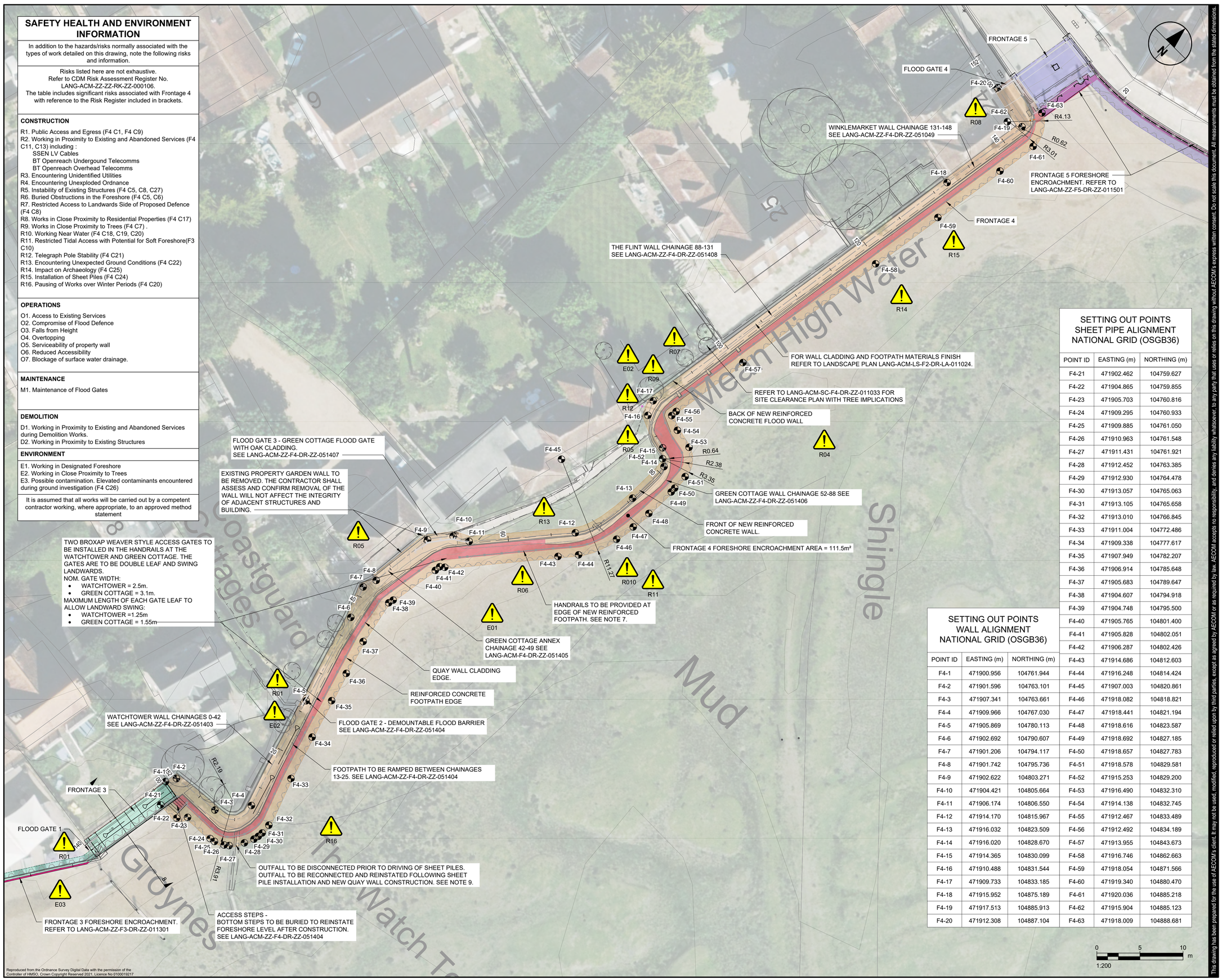
DEMOLITION

D1. Working in Proximity to Existing and Abandoned Services during Demolition Works.
D2. Working in Proximity to Existing Structures

ENVIRONMENT

E1. Working in Designated Foreshore
E2. Working in Close Proximity to Trees
E3. Possible contamination. Elevated contaminants encountered during ground investigation (F4 C26)

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement



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SETTING OUT POINTS SHEET PIPE ALIGNMENT NATIONAL GRID (OSGB36)

POINT ID	EASTING (m)	NORTHING (m)
F4-21	471902.462	104759.627
F4-22	471904.865	104759.855
F4-23	471905.703	104760.816
F4-24	471909.295	104760.933
F4-25	471909.885	104761.050
F4-26	471910.963	104761.548
F4-27	471911.431	104761.921
F4-28	471912.452	104763.385
F4-29	471912.930	104764.478
F4-30	471913.057	104765.063
F4-31	471913.105	104765.658
F4-32	471913.010	104766.845
F4-33	471911.004	104772.486
F4-34	471909.338	104777.617
F4-35	471907.949	104782.207
F4-36	471906.914	104785.648
F4-37	471905.683	104789.647
F4-38	471904.607	104794.918
F4-39	471904.748	104795.500
F4-40	471905.765	104801.400
F4-41	471905.828	104802.051
F4-42	471906.287	104802.426
F4-43	471914.686	104812.603
F4-44	471916.248	104814.424
F4-45	471907.003	104820.861
F4-46	471918.082	104818.821
F4-47	471918.441	104821.194
F4-48	471918.616	104823.587
F4-49	471918.692	104827.185
F4-50	471918.657	104827.783
F4-51	471918.578	104829.581
F4-52	471915.253	104829.200
F4-53	471916.490	104832.310
F4-54	471914.138	104832.745
F4-55	471912.467	104833.489
F4-56	471912.492	104834.189
F4-57	471913.955	104843.673
F4-58	471916.746	104862.663
F4-59	471918.054	104871.566
F4-60	471919.340	104880.470
F4-61	471920.036	104885.218
F4-62	471915.904	104885.123
F4-63	471918.009	104888.681

SETTING OUT POINTS WALL ALIGNMENT NATIONAL GRID (OSGB36)

POINT ID	EASTING (m)	NORTHING (m)
F4-1	471900.956	104761.944
F4-2	471901.596	104763.101
F4-3	471907.341	104763.661
F4-4	471909.966	104767.030
F4-5	471905.869	104780.113
F4-6	471902.692	104790.607
F4-7	471901.206	104794.117
F4-8	471901.742	104795.736
F4-9	471902.622	104803.271
F4-10	471904.421	104805.664
F4-11	471906.174	104806.550
F4-12	471914.170	104815.967
F4-13	471916.032	104823.509
F4-14	471916.020	104828.670
F4-15	471914.365	104830.099
F4-16	471910.488	104831.544
F4-17	471909.733	104833.185
F4-18	471915.952	104875.189
F4-19	471917.513	104885.913
F4-20	471912.308	104887.104

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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

NOTES

GENERAL NOTES

1. THIS DOCUMENT IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.
2. DO NOT SCALE FROM THIS DRAWING, USE ONLY PRINTED DIMENSIONS.
3. ALL DIMENSIONS IN MILLIMETRES, ALL CHAINAGES, LEVELS AND COORDINATES ARE IN METRES, UNLESS DEFINED OTHERWISE.
4. DEFENCE LENGTH/EXTENT 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 DRM (LANG-ACM-ZZ-ZZ-RK-ZZ-000106) FOR ANY IDENTIFIED POTENTIAL RISKS.
7. ALSO REFER TO DRAWINGS:
   MODEL CROSS SECTIONS - #031402
   TYPICAL CROSS SECTIONS - #051403 TO #051410
   SERVICES DIVERSION - #051411
   DRAINAGE - #011047 AND #021408

DRAWING SPECIFIC NOTES:

8. DEFENCE ALIGNMENT HAS BEEN DETERMINED FROM TOPOGRAPHICAL SURVEY AND LASER SCAN DATA PROVIDED BY COASTAL PARTNERS.
9. ALL EXISTING LAND DRAINAGE OUTFALLS SHALL BE IDENTIFIED PRIOR TO WORKS COMMENCING. OUTFALLS SHALL BE MAINTAINED OR PROVIDED WITH A FLAP VALVE TO ENSURE THAT CONTINUITY OF THE FLOOD DEFENCE IS MAINTAINED. REFER TO DRAWING #011049 FOR DETAILS. CONTRACTOR TO INSPECT AND DETERMINE CONDITION OF EXISTING OUTFALLS. CONTRACTOR TO REPAIR OR REPLACE DRAMAGED PIPE.
10. ALL EXISTING SERVICES ARE TO BE IDENTIFIED PRIOR TO WORKS COMMENCING. SERVICE INFORMATION IS SHOWN ON LANG-ACM-ZZ-F4-DR-ZZ-031402.
11. CONSTRUCTION WORKS ARE TO BE PAUSED OVER WINTER PERIODS. CONTRACTOR TO ENSURE STABILITY OF STRUCTURES AND CONTINUITY OF FLOOD DEFENCES OVER PERIODS WHERE WORK IS PAUSED, e.g BY PROVIDING TEMPORARY FLOOD BARRIERS.

LEGEND

PROPOSED SCHEME FOOTPRINT:
- Frontage 3
- Frontage 4
- Frontage 5
- Foreshore Encroachment Area

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	Design Update
I/R	DATE	DESCRIPTION

ISSUE PURPOSE / SUITABILITY

Detail Design Authorised/Accepted

KEY PLAN



PROJECT NUMBER

60656877

SHEET TITLE

FRONTAGE 4
GENERAL ARRANGEMENT

SHEET NUMBER

LANG-ACM-ZZ-F4-DR-ZZ-011401

Last saved by: COEZ (2025-02-03) Last Plotted: 2025-02-03
Filename: C:\pwworking\aecom_ds09_uk_2020\d0454975\LANG-ACM-ZZ-F4-DR-ZZ-011401

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

SETTING OUT POINTS WALL ALIGNMENT NATIONAL GRID (OSGB36)		
POINT ID	EASTING (m)	NORTHING (m)
F5-1	471913.658	104897.269
F5-2	471917.878	104896.762
F5-3	471938.815	104900.183
F5-4	471954.621	104907.613
F5-5	471960.120	104911.901
F5-6	471961.931	104917.772
F5-7	471965.879	104944.221
F5-8	471963.374	104944.410
F5-9	471963.876	104950.077
F5-10	471964.481	104956.910
F5-11	471966.187	104959.953
F5-12	471968.321	104966.316
F5-13	471968.730	104972.888
F5-14	471969.430	104983.145
F5-15	471968.888	104987.701
F5-16	471961.978	105001.902
F5-17	471953.124	105019.618
F5-18	471951.485	105022.496
F5-19	471946.257	105021.895
F5-20	471910.816	105016.281
F5-21	471917.966	104888.722

SETTING OUT POINTS SHEET PIPE ALIGNMENT NATIONAL GRID (OSGB36)		
POINT ID	EASTING (m)	NORTHING (m)
F5-22	471917.916	104889.318
F5-23	471918.150	104891.111
F5-24	471918.461	104892.274
F5-25	471918.702	104894.122
F5-26	471918.779	104894.717
F5-27	471918.972	104895.210
F5-28	471921.503	104895.117
F5-29	471924.063	104895.248
F5-30	471924.368	104895.276
F5-31	471926.746	104895.604
F5-32	471930.851	104896.528
F5-33	471933.164	104897.170
F5-34	471936.050	104898.005
F5-35	471940.068	104899.290
F5-36	471943.362	104900.796
F5-37	471946.626	104902.347
F5-38	471954.208	104905.886
F5-39	471957.413	104907.644
F5-40	471958.863	104908.699
F5-41	471959.376	104909.059
F5-42	471959.723	104909.401
F5-43	471960.671	104910.332
F5-44	471961.389	104911.305
F5-45	471961.740	104911.755
F5-46	471961.966	104912.310
F5-47	471962.229	104912.850
F5-48	471962.371	104913.436
F5-49	471962.670	104914.594
F5-50	471963.055	104916.336
F5-51	471963.284	104917.521
F5-52	471963.460	104918.721
F5-53	471964.219	104924.050
F5-54	471965.491	104932.960
F5-55	471966.435	104939.486
F5-56	471967.113	104943.629
F5-57	471967.166	104944.228
F5-58	471967.129	104944.277
F5-59	471966.625	104944.605
F5-60	471966.025	104944.658

SAFETY HEALTH AND ENVIRONMENT INFORMATION

In addition to the hazards/risks normally associated with the types of work detailed on this drawing, note the following risks and information.

Risks listed here are not exhaustive.
Refer to CDM Risk Assessment Register No.
LANG-ACM-ZZ-ZZ-RK-ZZ-000006.
The table includes significant risks associated with Frontage 5 with reference to the Risk Register included in brackets.

CONSTRUCTION

R1. Public Access and Egress (F5 C1)
R2. Construction Works in Proximity to Royal Oak Pub (F5 C2, C3)
R3. Working in Proximity to Existing and Abandoned Services (F4 C18) including :
- SSEN LV Cables
- BT Openreach Undergound Telecomms
- BT Openreach Overhead Telecomms
- Portsmouth Water Pipe
- SGN Gas Pipe

R4. Encountering Unidentified Utilities
R5. Encountering Unexploded Ordnance
R6. Instability of Existing Structures (F5 C7)
R7. Demolition Works
R8. Buried Obstructions (F5 C5)
R9. Restricted Access to Landwards Side of Proposed Defence
R10. Works in Close Proximity to Residential Properties
R11. Works in Close Proximity to Trees (F5 C13)
R12. Working Near Water (F5 C14, C15, C16)
R13. Restricted Tidal Access (F5 C14)
R14. Restricted Access for Construction Works (F5 C12, C13)
R15. Stability of Existing Walls (F5 C17)
R16. Encountering Unexpected Ground Conditions (F5 C18)
R17. Impact on Archaeology (F5 C19)
R18. Excavation Stability, Seepage and Inflow (F5 C20, 21)
R19. Working Near Fluvial Source (F5 C24)
R21. Pausing of Works over Winter Periods (F5 C16)

OPERATIONS

O1. Access to Existing Services
O2. Compromise of Flood Defence
O3. Falls from Height
O4. Overtopping
O5. Glass Barrier Breakage
O6. Erosion
O7. Root Protection Zones
O8. Manhole Cover Blowing
O9. Localised seepage at interface to services
O10. Blockage of surface water drainage.

MAINTENANCE

M1. Replacement of Flood Glass Panels
M2. Maintenance of Flood Gates

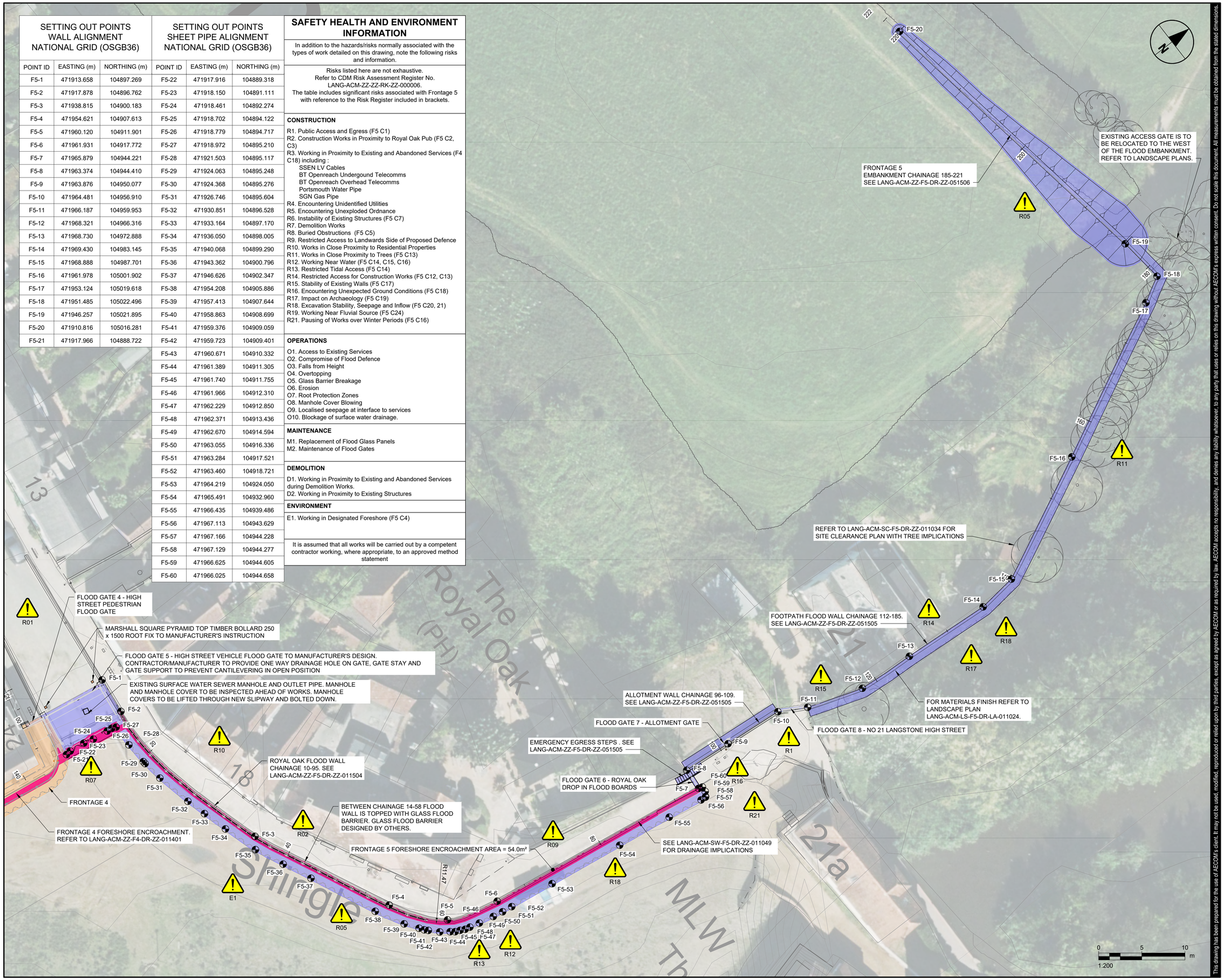
DEMOLITION

D1. Working in Proximity to Existing and Abandoned Services during Demolition Works.
D2. Working in Proximity to Existing Structures

ENVIRONMENT

E1. Working in Designated Foreshore (F5 C4)

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement



AECOM

PROJECT

Langstone Flood and Coastal Erosion Risk Management Scheme

CLIENT

HAVANT BOROUGH COUNCIL

CONSULTANT

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NOTES

GENERAL NOTES
1. THIS DOCUMENT IS TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DOCUMENTATION.
2. DO NOT SCALE FROM THIS DRAWING, USE ONLY PRINTED DIMENSIONS.
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-000106) FOR ANY IDENTIFIED POTENTIAL RISKS.
7. ALSO REFER TO DRAWINGS:
GENERAL ARRANGEMENT - # 011501
MODEL CROSS SECTIONS - # 031502 AND # 031503
TYPICAL DETAILS - # 051504 TO # 051506
DRAINAGE - # 011049, # 021050 AND # 051051
LANDSCAPE - # 011024
REBAR DETAILS - # 08195# TO 08195#

DRAWING SPECIFIC NOTES
8. DEFENCE ALIGNMENT HAS BEEN DETERMINED FROM TOPOGRAPHICAL SURVEY AND LASER SCAN DATA PROVIDED BY COASTAL PARTNERS.
9. ALL EXISTING LAND DRAINAGE OUTFALLS SHALL BE IDENTIFIED PRIOR TO WORKS COMMENCING. OUTFALLS SHALL BE SEALED OR PROVIDED WITH A FLAP VALVE TO ENSURE THAT CONTINUITY OF THE FLOOD DEFENCE IS MAINTAINED. REFER TO DRAWING #051051 FOR DETAILS. CONTRACTOR TO INSPECT AND DETERMINE CONDITION OF EXISTING OUTFALLS. DAMAGED PIPES TO BE REPLACED.
10. ALL EXISTING SERVICES ARE TO BE IDENTIFIED PRIOR TO WORKS COMMENCING. SERVICE INFORMATION IS SHOWN ON LANG-ACM-ZZ-F5-DR-ZZ-031502 AND 031503.
11. A GAP IN THE SHEET PILES AT THE HIGH STREET IS REQUIRED DUE TO PRESENCE OF SOUTHERN WATER PIPE.
12. CONSTRUCTION WORKS ARE TO BE PAUSED OVER WINTER PERIODS. CONTRACTOR TO ENSURE STABILITY OF STRUCTURES AND CONTINUITY OF FLOOD DEFENCES OVER PERIODS WHERE WORK IS PAUSED, e.g BY PROVIDING TEMPORARY FLOOD BARRIERS.

LEGEND

PROPOSED SCHEME FOOTPRINT:
- Frontage 4
- Frontage 5
- Foreshore Encroachment Area

ISSUE/REVISION

P01	21/11/23	100% Detailed Design
P02	08/02/24	100% Detailed Design
C01	08/02/24	Construction Issue
P03	04/02/25	No 21 Update
C02	04/02/25	No 21 Update
I/R	DATE	DESCRIPTION

ISSUE PURPOSE / SUITABILITY

Detail Design Authorised/Accepted

KEY PLAN



PROJECT NUMBER

60656877

SHEET TITLE

FRONTAGE 5
GENERAL ARRANGEMENT

SHEET NUMBER

LANG-ACM-ZZ-F5-DR-ZZ-011501

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Filename: C:\pwworking\aecom_ds09_uk_2020\d0045975\LANG-ACM-ZZ-F5-DR-ZZ-011501