Our Ref: J-2799-02
Date: 19 April 2023

Change of Use of Part Ground and First Floor Commercial Space With Second Floor Extension to Create Two Residential Units (Retaining Existing Ground Floor Street Frontage Commercial Area) Including Partial Demolition of Rear Part of Building. The Isles Of Scilly Steamship Company, Hugh Street, Hugh Town, St Mary's, Isles Of Scilly, TR21 0LJ

Planning Ref: P/22/085/COU Steamship House

Addendum to Flood Risk Assessment

1.0 Introduction

The Isle of Scilly Steamship Co. Ltd. are proposing to make alterations to the existing Steamship House building in Hugh Town, St. Mary's, Isle of Scilly (IoS). To this end a planning application has been submitted under reference P/22/085/COU to seek approval for the works.

As the site is located within Flood Zone 3, a Flood Risk Assessment (FRA) Report has been prepared by Engineering and Development Solutions Ltd. in order to support the planning application (report ref J-2799-Rev. 01).

Subsequent to submission of the FRA, comments have been received from the Project Director of Climate Adaptation Scilly (IoS Council) and from the Environment Agency; copies of associated correspondence are attached within **Annex A**.

This document is prepared for the purposes of responding to the principal comments made within the aforementioned correspondence. It is intended to supplement the initial FRA and as such this addendum statement should be read in conjunction with the FRA report.

Principal comments made are addressed as follows.

2.0 Configuration of Accommodation

Concern has been expressed that no internal escape route has been identified for residents of the ground floor accommodation (Flat 3) in the event of a flood. There is also sleeping accommodation proposed on the ground floor in the case of Flat 3, which was not preferred on flood risk grounds.

This concern has been recognised and the proposed accommodation has been reconfigured accordingly. To this end the sleeping accommodation within Flat 3 has been moved to the first floor of the building. In addition an internal stairway has been provided within the flat to link the ground floor of Flat 3 with the first-floor accommodation. A revised layout for the proposed accommodation is provided within **Annex 2**.

This removes any sleeping accommodation from the ground floor of the building and provides a safe haven for the residents of Flat 3 in the event of a flood; accessing the safe haven does not require persons to leave the building. The maximum depth of flooding over the lifetime of the development is predicted to be 1.79m above the ground floor slab of the building whilst the first floor will be set at a height of some 2.91m above the ground floor. As such, a refuge at first floor level will provide a freeboard of at least 1.12m above the maximum predicted flood level.

As noted in the initial FRA, the maximum time of detention on the first floor of the premises is estimated to be 3 hours 45 minutes before access is available back onto Hugh Street; this is considered to be a viable period for persons to sustain themselves during the flood event.

All areas of the proposed accommodation associated with Flats 1 and 2 will remain above the maximum predicted flood level.

As the flooding is of a tidal nature, it will be largely predictable in advance and residents should have time to prepare for the event. In this regard the FRA report states the following:

> *"Given the timing of spring tides in this area, the high-risk times will be centred around the early morning and late afternoon periods during a spring tide cycle. Spring tides occur on a consistent bi-weekly basis with the peak of the tide typically occurring between 5:00 to 7:00 in the morning and 17:00 to 19:00 in the evening.*
>
> *High spring tides are predictable, but weather conditions can create storm surges and ground swell that add to the water levels, so unfavourable conditions could still occur outside of the spring tide cycle, though the worst conditions will always occur during the coincidence of a high spring tide, strong winds from the north to north-west and storm surge caused by low barometric pressure."*

3.0 Action of Flood Defences

Concern is expressed within the correspondence received that insufficient consideration has been given to the action of flood defenses and their interaction with surface water runoff/flooding.

The action of flood defences infrastructure was not addressed within the FRA as there are not considered to be any designated flood defences present which would provide any meaningful protection to the site from tidal inundation.

In this context, when considering ground levels and LIDAR data provided, it is evident that sea water will initially approach the site from St Mary's Harbour via the alleyway which runs between the buildings backing onto the harbour beach, specifically between the Old Metal Store and the Watch House; see Route 1 on **Figure 1** below.

This alleyway terminates at the beach in a concrete ramp and shallow step down onto the sand; see **Photo 1** below. The top of the concrete step is set at an approximate elevation of 3m AOD. Once the surface of the sea reaches this level, seawater is able to move up the alleyway unobstructed as the tide rises. It is a short distance of some 15m to the back of subject site where the external ground level is approximately 3.70m AOD. At an elevation of 3.81m AOD, water will be at the same level as the ground floor slab.

We are not aware of any flood protection infrastructure being in place along this flow route.

The quay to St Mary's Harbour will provide some benefit in reducing wave impact on the beach but this is remote from the site and does not act to reduce still water tide levels.

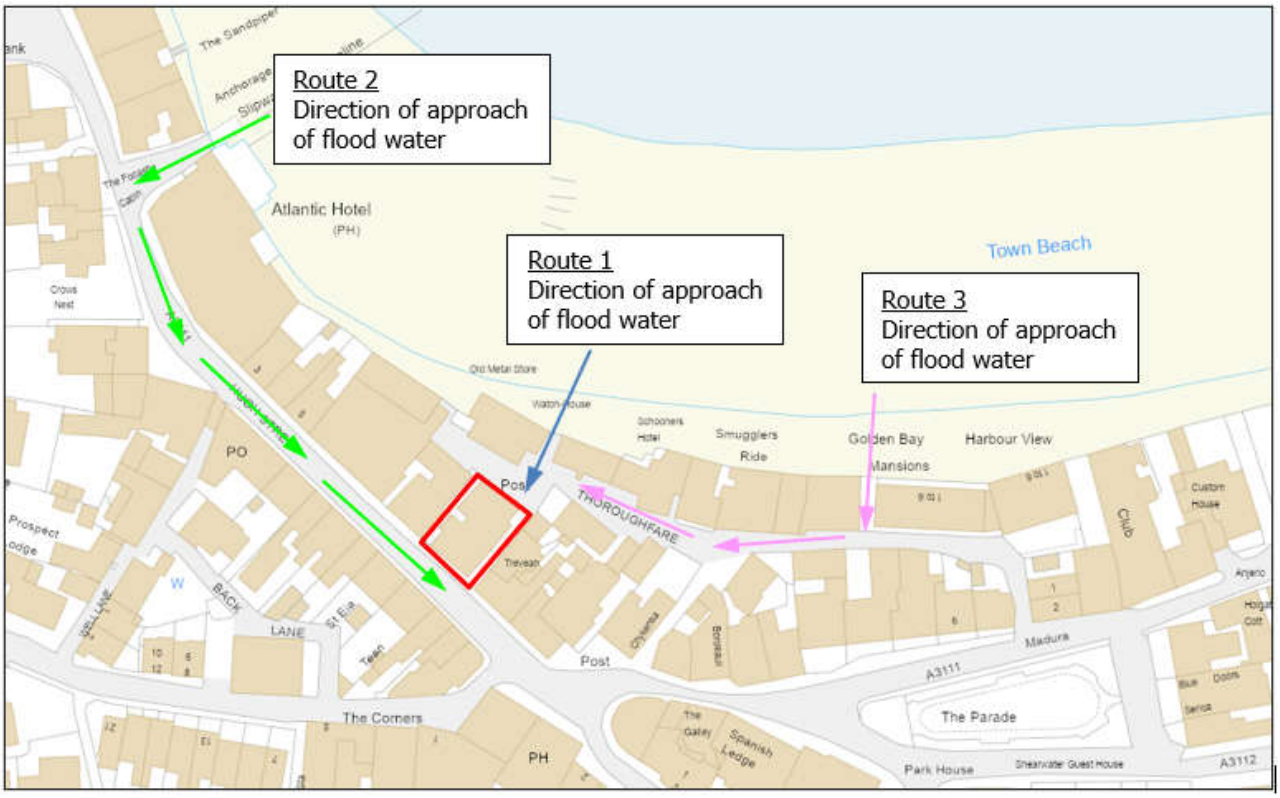


Figure 1 Plan Showing Potential Tidal Flood Routes to the Site

Photo 1 View on Beach Showing Potential Tidal Flood Routes to the Site

Notwithstanding the presence or otherwise of flood defences along Route 1, there are other inundation routes to the site that are able to bypass this alley way. In this regard there is a route from the harbour up the slipway to the side of Atlantic Hotel; see Route 2 on **Figure 1** and **Photo 2** below. Ground levels on the road at the top of the slipway are set at approximately 3.75m AOD. Once the surface of the seawater reaches this level, water is able to move along Hugh Street towards the site as the road is essentially flat or lower than this level. Water can then run down the alleyway at the side of the building to the accommodation behind.

Photo 2 View on Slipway Showing Potential Tidal Flood Routes to the Site

There is also a third potential route off the beach through the alley way to the immediate east of Golden Bay Mansions; see Route 3 on **Figure 1** and **Photo 3** below.

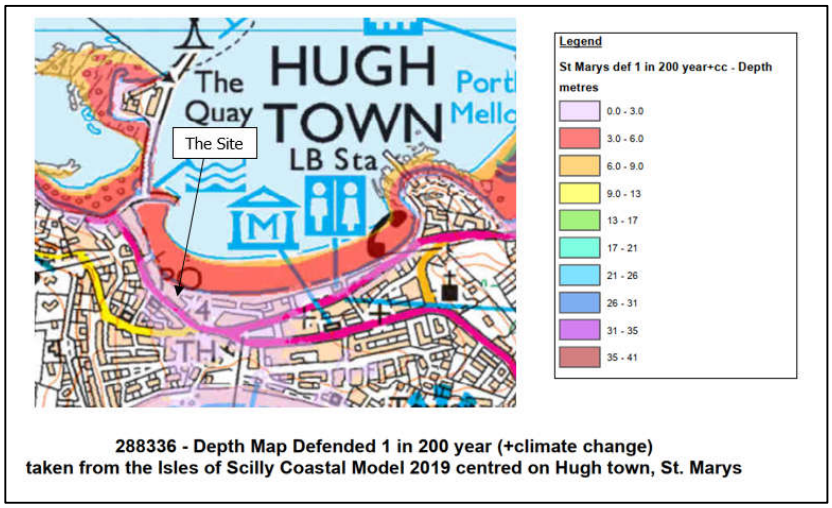
Photo 3 View Showing Potential Flood Routes to Side of Golden Bay Mansions

Along this route seawater will enter up the alleyway and onto the Throughfare once it reaches a surface elevation of about 4.0m AOD. Once at this level water is free to move along the Thoroughfare which is

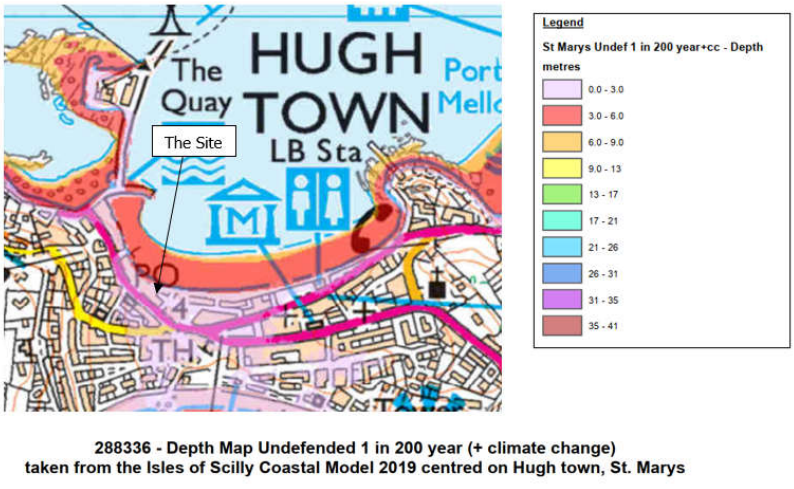
generally at an elevation of 4.0m AOD, falling to 3.75 m AOD at the site. Again, we are not aware of any designated flood defences along this route.

There are flood defences in place along Porthcressa Beach to the southeast of the site, however, it is evident that these are not effective in protecting the site as this would not be the direction of approach for tidal flooding. In view of the above, it is concluded that the site does not benefit from any readily apparent flood defences and consideration of the action of flood defences is not relevant to assessment of flood risks for the development.

It is relevant to note that the EA`s own flood mapping shows no apparent difference in flood extents or depths in this part of the island between the defended and undefended cases, confirming that flood defences play no significant part in influencing flood levels at the site: see comparative 1 in 200 years plus climate change cases below taken from EA Product 4 Information, **Figure 2** below.



288336 - Depth Map Defended 1 in 200 year (+climate change)
taken from the Isles of Scilly Coastal Model 2019 centred on Hugh town, St. Marys



288336 - Depth Map Undefended 1 in 200 year (+ climate change)
taken from the Isles of Scilly Coastal Model 2019 centred on Hugh town, St. Marys

Figure 2 EA Product 4 Information Extract

If there are flood defences in place along these flood routes which we are not aware of, then we would be pleased to receive associated details for our further consideration.

4.0 Surface Water Drainage and Potential for Surface Water Locking by Tide

Responses received from the FRA call for more information to be provided on surface water drainage proposals and for the implications on tidal lock on drainage outlets to be considered. In this regard it is noted that the proposed development will not increase the area of impermeable surfacing on site and that it is intended to retain the existing surface water drainage provisions as there is no need to alter these arrangements.

It is confirmed that existing surface water drainage arrangements largely comprise discharge of roof water onto the ground; see examples in **Photos 4** to **6** below.

Photo 4 View of Rear of Premises

Photo 5 View of Side of Premises

Photo 5 View of Side of Premises

The ground around the building generally falls in a northerly direction towards the harbour such that rainfall runoff discharged from the site onto the ground would mainly run overland down the alleyway alongside the Watch House and then onto the beach. There is a consistent fall on the ground surface along this route with no significant obstructions such that flow can run away at shallow depth and has a free overfall onto the beach at the concrete step at the end of the ramp.

In consideration of this, there would be no interaction between rainfall runoff from the site and tidal effects until the seawater surface reached the elevation of the top of the step at approximately 3m AOD. At this level a free overfall onto the beach will be prevented and surface water would disperse over the top of the surface of the seawater. At this point water levels in the alleyway between the site and the harbour will effectively be dictated by seawater levels in the harbour rather than by rainwater levels.

No tidal lock will occur, however, there potentially could be a miniscule raising in localized seawater levels as the surface water disperses and spreads out over the seawater.

Reference to EA mapping for surface water flooding indicates that the flow route down the alleyway is not a significant conveyance route for the overland movement of surface water. The principal flow routes for runoff from upslope areas are down the slipway to the side of the Atlantic Inn or through the opening onto the beach at the side of 1 to 6 Harbour View; see **Figure 3** below.

Some standing water is shown to exist to the rear of the building (depth 300mm or less) for the low-risk scenario (see **Figure 4** below), but no flooding is shown to occur for either the high or medium risk scenarios. The low-risk event has a probability of occurring between 0.1% and 1% each year (1 in 1000 year to 1 in 100 year).

The probability of this event occurring coincident with the peak of a 1 in 200-year tide over a window of some 4 hours is considered to be minimal.

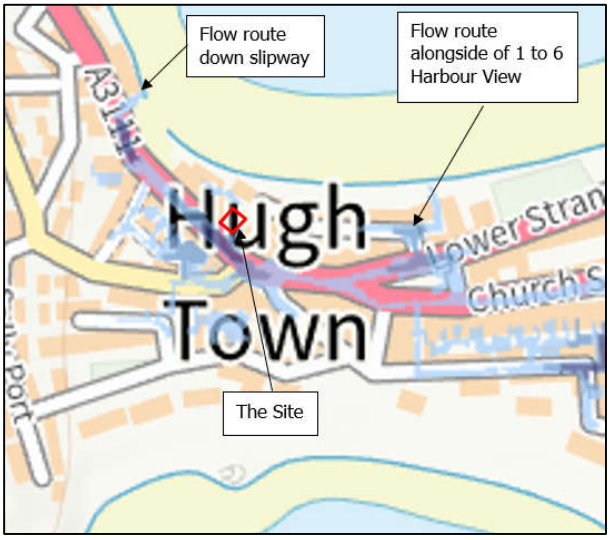


Figure 3 **Extract from EA Long Term Flood Risk Map for Surface Water**

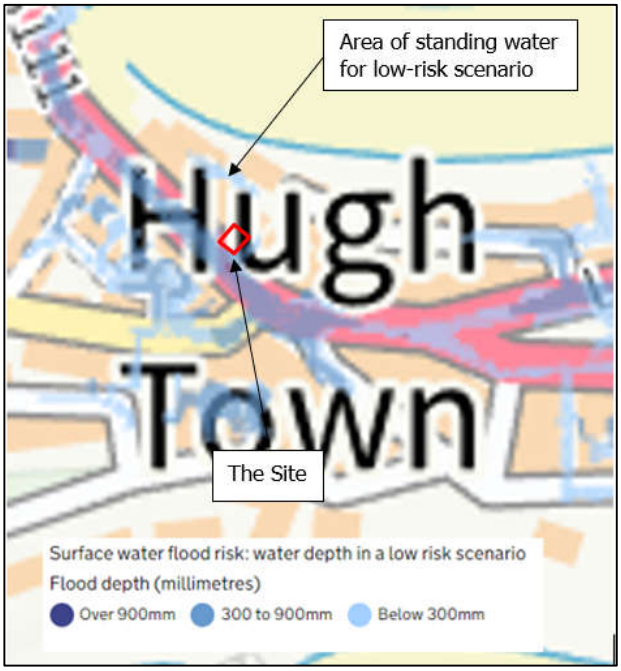


Figure 4 **Extract from EA Long Term Flood Risk Map for Low-Risk Scenario**

In this regard, reference to the simplified joint probability method contained in DEFRA Reports FD2308/TR1 and FD2308/TR2 show that the independency between rainfall and sea level in the Isle of Scilly is modestly correlated; see Figure 3 from the report reproduced as **Figure 5** below.

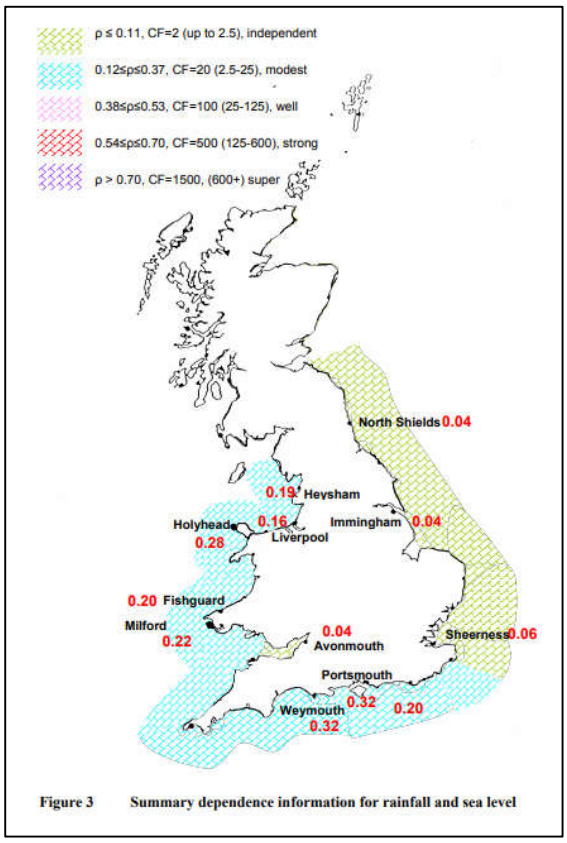


Figure 5 Summary Dependencies for Rainfall and Sea Level from FD2308/TR2

Table 3.5 of FD2308/TR2 (reproduced as **Figure 6** below) provides the combination of variables required for a joint exceeded of 1 in 100 years (note that 1 in 200 years is not provided). So for a 1 in 100-year tide, the rainfall marginal return period would be 0.03; this is the peak rainfall that occurs on average 33 times a year or approximately 3 times a month. This would be a minor event of say 3mm to 5mm/hour rainfall intensity.

It is difficult to accurately quantify by how much the level of the surface of the sea water would raise by due to the discharge of the rainwater as this is a highly dynamic and diffuse situation. However, on a judgment basis, and considering the preceding rainfall intensities, the effect would most likely be measured in single millimetres of water.

Table 3.5 Combinations of two variables for a joint exceedence return period of 100 years

Variable 1 marginal return period (years)	Variable 2 marginal return period (years) for different levels of dependence				
	none	modestly correlated	well correlated	strongly correlated	super correlated
	CF = 2	CF = 20	CF = 100	CF = 500	CF = 1500 (surge only)
0.01	28	N/A	N/A	N/A	N/A
0.02	14	100	N/A	N/A	N/A
0.05	6	60	N/A	N/A	N/A

R&D TECHNICAL REPORT FD2308/TR1

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0.1	2.8	28	100	N/A	N/A
0.2	1.4	14	71	N/A	N/A
0.5	0.6	6	28	100	N/A
1	0.28	2.8	14	71	N/A
2	0.14	1.4	7	35	100
5	0.06	0.6	2.8	14	42
10	0.03	0.28	1.4	7	21
20	0.014	0.14	0.7	4	11
50	0.006	0.06	0.28	1.4	4
100	0.003	0.03	0.14	0.7	2.1

Figure 6 Table 3.5 Taken From FD2308/TR1

It is also possible to consider a medium probability tidal event occurring at the same time as a medium probability rainfall event of the same combined probability. With reference to **Figure 6,** this would be equivalent to a 1 in 10-year tidal event combined with a 1 in 5-year rainfall event .

In terms of rainfall, the intensity for this event ($M_{5\text{-}15\ min}$) would be approximately 44mm/hr. Considering the tidal situation, there would be no tidal flooding at the site as seawater would not reach the site for this event (see tidal levels provided in **Tables 1** and **2** overleaf).As such, any flooding occurring would be from surface water sources only; this would arise from water running down the alley way onto the beach and would most likely be in the order of 25mm depth.

With the onset of climate change, flooding due to tidal effects from a 1 in 10-year event would produce a flood depth of some 1.25m to 1.36m at the site depending on the extent of wave action (see **Tables 1** and **2)**. Rainfall would spread out over the surface of the sea would be measured in the low tens of millimetres.

Therefore it is apparent for all tide/rainfall combinations considered that the vastly dominant effect in setting flood levels would be the level of the seawater and the implication of millimeters of rainwater in the context of up to 1.79m depth of tidal flooding is considered to be inconsequential.

For this reason surface water flooding (overland flow) was not considered in great detail within the FRA and the following statement was made;

> *"This form of flooding is considered to be of low risk compared to tidal flooding, so this mechanism of flooding is discounted from further assessment as consideration of tidal flooding will provide a much more onerous case."*

In view of the above, this statement is still considered to be entirely valid.

5.0 Increased Frequency of Lesser Events Arising From Climate Change

Comments received have requested that further consideration be given to increased flooding during lesser events arising from the effects of climate change. It is contended that this was addressed to a large extent by means of Table 1 within the original FRA report. Notwithstanding this, further information is provided below by means of **Table 1** and **2** below in response to this comment. A predicted rise in sea level of 1.45m has been assumed over the lifetime of the development (100 years) due to climate change effects.

The still water situation is considered within **Table 1** below and the wave overtopping/surge situation is considered within **Table 2.** Rainfall effects are not incorporated for the reasons given in **Section 4.0** above. Flood depths are based on a ground floor slab level of 3.81m AOD.

Flood Event Return Period (Years)	Annual Event Probability (%) AEP	Current Day Still Water Level (m AOD)	Depth of Flooding to Ground Floor (m)	Still Water Level with Climate Change Allowance (m AOD)	Depth of Flooding to Ground Floor (m)
1	100	3.30*	No flooding	4.75	0.94
2	50	3.48	No flooding	4.93	1.12
5	20	3.56	No flooding	5.01	1.2
10	10	3.61	No flooding	5.06	1.25
50	2	3.74	No flooding	5.19	1.38
100**	1	3.77	No flooding	5.22	1.41
200	0.5	3.84	0.03	5.29	1.48

Table 1 – Flood Depths for Still Water Case - Current Day and Climate Change
(*Denotes approximate level only. ** Denotes levels by interpolation)

Flood Event Return Period (Years)	Annual Event Probability (%) AEP	Current Day Overtopping Level (m AOD)	Depth of Flooding to Ground Floor (m)	Overtopping Water Level with Climate Change Allowance (m AOD)	Depth of Flooding to Ground Floor (m)
1	100	3.46*	No flooding	4.91	1.10
2	50	3.63	No flooding	5.08	1.27
5	20	3.72	No flooding	5.17	1.36
10	10	3.77	No flooding	5.22	1.41
50	2	3.90	0.09	5.35	1.54
100**	1	3.93	0.12	5.38	1.57
200	0.5	4.0	0.19	5.6	1.79

Table 2 – Flood Depths for Overtopping Case- Current Day and Climate Change
(*Denotes approximate level only. ** Denotes levels by interpolation)

With reference to **Table 1** (still water conditions), it is apparent that tidal flooding of the site is unlikely to occur over the lifetime of the development (100 years) based on present day sea levels.

When considering the wave overtopping scenario (**Table 2**), flooding is predicted to occur on an approximate frequency of 1 in 50-year based on present day sea levels. For this event the depth of flooding would be 0.09m.

When allowing for the assumed effects of climate change, tidal flooding in the still water situation is predicted to occur every year towards the end of the presumed lifespan of the development to a minimum annual flood depth of 0.94m. Monthly flooding to a lesser depth is also likely to occur.

When allowing for the assumed effects of climate change and wave overtopping, tidal flooding is predicted to occur on an annual basis to a minimum annual depth of 1.10m.

As such, flooding is predicted to be a regular occurrence towards the end of the lifespan of the development, possibly on a month basis, but certainly on an annual basis. Annually occurring flood depths are predicted to be up to 0.94m in the still water case and up to 1.10m with the effects of wave overtopping.

6.0 Flood Resistant and Resilient Measures

Comments received following issue of the FRA note that robust flood resistant and resilient measures will need to be incorporated within the development.

This is acknowledged and the FRA has provided proposals for such measures including flood resilient construction, setting electrical circuitry and apparatus above the flood level and the use of flood resistant barriers on all the ground floor door openings to the buildings.

In the light of comments received it is confirmed that the following measures will also be implemented;

- Backflow preventers to be provided on foul sewer pipes (surface water drainage preventers not applicable)
- Telephone connections to enter the building above the design flood levels
- No additional openings or piercings to be made below the design flood levels

7.0 Flood Warning and Evacuation Plan

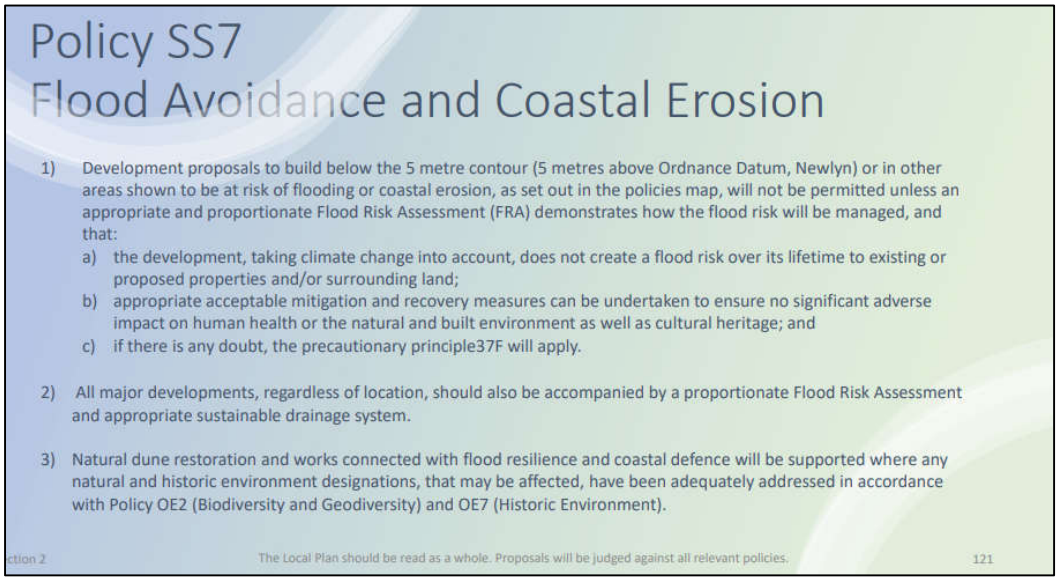
It is confirmed that a full and comprehensive Flood Warning and Evacuation Plan will be prepared for the development generally in accordance with Section 7.5 of the FRA.

It is requested that the provision of a detailed plan be dealt with by means of a condition within any planning approval granted.

8.0 Compliance with Policy SS7

Comments received have advised that it would be prudent to confirm that the proposed development meets with Policy SS7 of the local plan.

Policy SS7 of the 2015 to 2030 Isle of Scilly Local Plan is reproduced below by way of **Figure 7** for convenience.



Policy SS7
Flood Avoidance and Coastal Erosion

1) Development proposals to build below the 5 metre contour (5 metres above Ordnance Datum, Newlyn) or in other areas shown to be at risk of flooding or coastal erosion, as set out in the policies map, will not be permitted unless an appropriate and proportionate Flood Risk Assessment (FRA) demonstrates how the flood risk will be managed, and that:
   a) the development, taking climate change into account, does not create a flood risk over its lifetime to existing or proposed properties and/or surrounding land;
   b) appropriate acceptable mitigation and recovery measures can be undertaken to ensure no significant adverse impact on human health or the natural and built environment as well as cultural heritage; and
   c) if there is any doubt, the precautionary principle37F will apply.

2) All major developments, regardless of location, should also be accompanied by a proportionate Flood Risk Assessment and appropriate sustainable drainage system.

3) Natural dune restoration and works connected with flood resilience and coastal defence will be supported where any natural and historic environment designations, that may be affected, have been adequately addressed in accordance with Policy OE2 (Biodiversity and Geodiversity) and OE7 (Historic Environment).

ction 2 The Local Plan should be read as a whole. Proposals will be judged against all relevant policies. 121

Figure 7 Table 3.5 taken form FD2308/TR1

Item 1) requires that all proposed development on land below an elevation of 5m AOD should be provided with an appropriate and proportionate Flood Risk Assessment (FRA). This addendum statement, in conjunction with the initial FRA report, meets this requirement.

Sub item a) requires that any development does not create a flood risk to existing or proposed properties and surrounding land. The proposed development does not create any additional runoff, nor does it act to infill the flood plain or redirect flood flow routes as all the work may be undertaken within the footprint of an existing building. As such it complies with this sub item.

Sub item b) requires acceptable mitigation and recovery measures to be undertaken. It is considered that this will be complied with in view of the flood mitigation measures and Flood Warning and Evacuation Plan that are proposed.

Precautionary principles have been applied wherever practicable within the FRA in compliance with Sub item c).

Item 2) does not apply as this is not a major development.

Item 3) does not apply as no natural dune restoration or coastal defence works are involved.

Therefore it is concluded that the proposed development is complaint with Policy SS7.

APPENDIX A CORRESPONDENCE RECEIVED

Liv Rickman

From: Planning (Isles of Scilly)
Subject: FW: Weekly Planning List

Switch-MessageId: 8c8d40a837c24deb9365cce65d678665

From: Stephen Swabey <Stephen.Swabey@scilly.gov.uk>
Sent: 30 January 2023 18:03
To: Planning (Isles of Scilly) <planning@scilly.gov.uk>
Subject: RE: Weekly Planning List

Liv

I've had a look through the Flood Risk Assessment for the proposed IoS Steamship development (P-22-085) and have a few comments that may be similar to comments of the Environment Agency.

The application deals with surface water flooding by suggesting that tidal locking leads to surface flooding and this risk can be dealt with. However, no surface water currently can be discharged from the area behind flood defences until the outlet point is lower than the trapped water level (this is tidal locking in Hugh Town). If Hugh Town stormwater drainage systems contain no backflow preventers, the stormwater is added to tidal flooding that occurs from the sea up through the stormwater drains. If backflow preventers are present, stormwater is retained behind any coastal defences and is added to water volumes that overtop any sea defences or undefended frontages.

I suggest the applicant is asked to justify with analysis and calculations their assumption that the 'small drainage area' and the 'existing drainage networks… will dispose of surface water runoff from the site area", given the likely tidal locking may prevent this.

In addition, the likelihood of surface water flooding occurring in central Hugh Town during a storm event is likely to be increased, because of the storm. The joint probability of stormwater flooding *together* with tidal flooding may be a higher risk than just tidal flooding alone. Lack of observations of previous surface water flooding in written material is not sufficient evidence to demonstrate that it does not occur to a degree that may increase flood risk at the site.

A first principles identification of the catchment area contributing stormwater to the area around the site, together with the likely volume of stormwater present during a design event, given the area of buildings and structures that cannot be occupied by stormwater on much of the land in central Hugh Town, and the additional flooding that this may result in is likely to provide a more robust understanding of whether this is an additional flood risk for the site.

Given the depth of flooding that is assessed in the FRA, it may not be appropriate to rely on warning systems to ensure safety for residents in the proposed ground floor flat. I suggest it would be more appropriate to avoid any new residential occupation where future flood risk could have significant consequences for life and property.

If residential development is allowed at ground floor level, additional measures that would be useful to reduce the impact of coastal and stormwater flooding might be:

1) Backflow preventers on foul sewers to prevent flooding that is able to occupy the sewer system from causing sewage contamination within the building
2) Backflow preventers on stormwater sewers to prevent the stormwater system from causing stormwater flooding within the building through excessive hydraulic head within the mains stormwater drainage system
3) All electrical connections to the mains electricity supply should enter the building above the design flood level and electrical meters should be placed above design flood levels
4) Telephone connections should enter the building above the design flood level

5) No openings or open piercings in the outer wall of the buildings (such as air vents) should be permitted below the design flood level unless fitted with a backflow preventing device that allows the piercing/opening to operate as normal when no flood is present, but prevents ingress of floodwater during the design flood event. All piercings must be made waterproof to a standard that copes with a static water head equivalent to the design flood level at that point. All such openings must be maintained in perpetuity.
6) An escape route from flooding should be identified for occupants of the ground floor residence, because they cannot escape on site by going upstairs – there is no upper floor in that property.

These measures should also be considered for the non-residential part of this development, to reduce losses during floods.

Stephen
Stephen Swabey (Project Director, Climate Adaptation Scilly)

Liv Rickman
Council of the Isles of Scilly
Planning & Development Department
Old Wesleyan Chapel Garrison Lane
St Mary's
Isles of Scilly
TR21 0JD

Our ref: DC/2023/123054/02-L01
Your ref: P/22/085/COU

Date: 03 March 2023

Dear Liv Rickman

CHANGE OF USE OF PART GROUND AND FIRST FLOOR COMMERCIAL SPACE WITH SECOND FLOOR EXTENSION TO CREATE TWO RESIDENTIAL UNITS (RETAINING EXISTING GROUND FLOOR STREET FRONTAGE COMMERCIAL AREA) INCLUDING PARTIAL DEMOLITION OF REAR PART OF BUILDING.
THE ISLES OF SCILLY STEAMSHIP COMPANY, HUGH STREET, HUGH TOWN, ST MARY'S, ISLES OF SCILLY, TR21 0LJ

Thank you for consulting us on this planning application.

Environment Agency Position

We are concerned about the level of potential risk at this site, as the Shoreline Management Plan indicates Hugh Town is particularly vulnerable to flooding, being on a narrow strip of land with potential coast intrusion from both the north and south coast. Before updating the FRA it may be prudent to confirm regards the development and whether it meets with Policy SS7 or the aspirations of the Shoreline Management Plan. The development includes change of use but the extension for residential units results in an increase in flood risk because the consequences would be raised by introducing more residential accommodation to an area at high flood risk. There is also the increase in Vulnerability in terms of NPPF and its guidance.

We are also aware that many insurance and mortgage companies are refusing to take on new development in areas at high flood risk and we feel it only fair to warn that this could be the case.

If after discussions, the planners are minded to approve the application, we would wish to see the building being made as flood resistant and resilient as possible (as explained in our previous response) with robust measures.

The proposed adjusted layout would be a great improvement and at least provide safe refuge. The council should be able to provide you with details of any flood defences in the area to include condition and any plans for improvements that could benefit the site.

Cont/d..

A condition could be included for the production of a Flood Warning and Evacuation prior to occupation to deal with the as yet unknowns.

Yours sincerely

Mark Williams
Planning Advisor

Direct e-mail spdc@environment-agency.gov.uk

End

Liv Rickman
Council of the Isles of Scilly
Planning & Development Department
Old Wesleyan Chapel Garrison Lane
St Mary's
Isles of Scilly
TR21 0JD

Our ref: DC/2023/123054/01-L01
Your ref: P/22/085/COU

Date: 06 February 2023

Dear . Rickman

**CHANGE OF USE OF PART GROUND AND FIRST FLOOR COMMERCIAL SPACE WITH SECOND FLOOR EXTENSION TO CREATE TWO RESIDENTIAL UNITS (RETAINING EXISTING GROUND FLOOR STREET FRONTAGE COMMERCIAL AREA) INCLUDING PARTIAL DEMOLITION OF REAR PART OF BUILDING.
THE ISLES OF SCILLY STEAMSHIP COMPANY, HUGH STREET, HUGH TOWN, ST MARY'S, ISLES OF SCILLY, TR21 0LJ**

Thank you for consulting us on this planning application.

Environment Agency Position
There is an objection as the proposal does not meet with the requirements of paragraph 167 of the NPPF.
The site is identified in Flood Zone 3 and introduces new dwellings into an area predicted (as stated within the submitted FRA) up to a depth of 1.79m during the future 1 in 200 year (0.5% AEP) event. The LPA will need to be satisfied that they consider the site has met their policy SS7 Flood Avoidance

Reason
We would comment on the FRA as follows

- The FRA has addressed the likely depth of flooding during a future 1 in 200 year event with Climate Change but has failed to address the increased frequency during lesser events due to climate change. With flooding to the depth predicted and on a more frequent basis there is a greater probability of significant damage to the building. Very robust flood resistant and resilient measures would need to be adopted to allow the building to be quickly brought back into use without significant refurbishment, as required by the NPPF
- No assessment has been provided on the current level, location or condition of any flood defences. The Council may also wish to consider that the SMP policy for this zone is Hold the Line to 2023 but from 2105 the policy changes to Managed Retreat
- The proposal relies on future inhabitants of the site receiving a flood warning and evacuating the site prior to a flood event, to allow them to be safe, both now and even more so in the future. We believe that therefore to provide the councils

emergency planners with an idea of whether they feel an event of this magnitude can be managed for the lifetime of the development a full and comprehensive Flood Warning and Evacuation Plan should be submitted prior to determination and fully signed off by the council's emergency planners. Our greatest concerns are with the ground floor residential development which provides no safe refuge.

- The disposal of surface water from the site has not been addressed with the FRA and seems to wholly rely on an unspecified existing SW drainage system. It is unclear if there is tide locking of this system or the potential for water to syphon back through the system. Climate change and increased rainfall should be taken into account.

Overcoming our objection
The applicant should submit a revised FRA that addresses the points raised above.

Yours sincerely

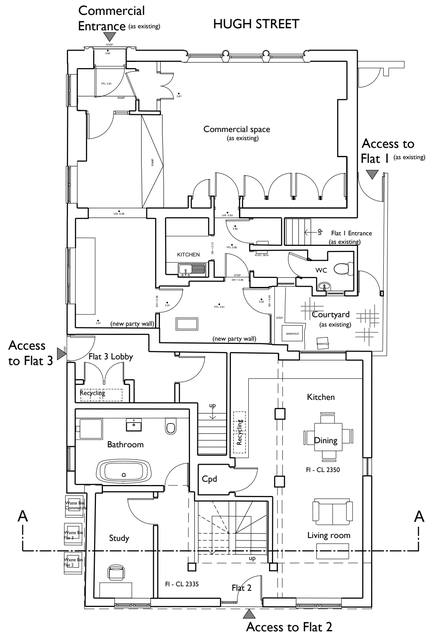
Mark Williams
Planning Advisor

Direct e-mail spdc@environment-agency.gov.uk

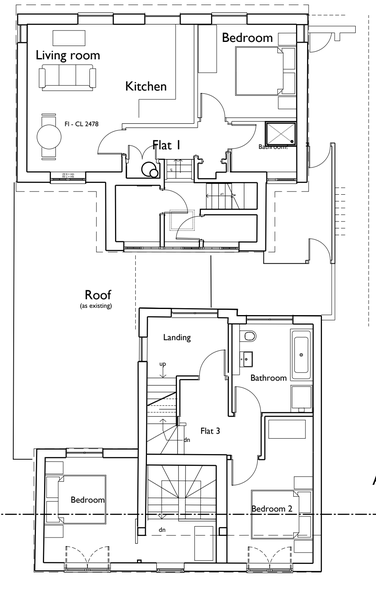
End

APPENDIX B REVISED LAYOUT FOR INTERNAL ACCOMMODATION

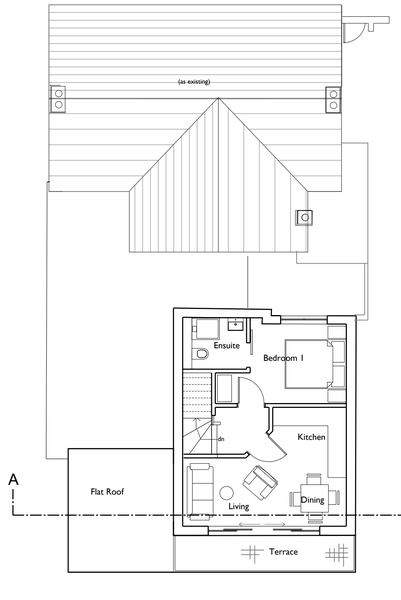
Engineering and Development Solutions Ltd
Registered Office: Engineering and Development Solutions, Unit E4, Threemilestone Industrial Estate, Truro, Cornwall, TR4 9LD
Registered in England and Wales No. 10467487
Phone 01872 306311 Mobile 07973816457



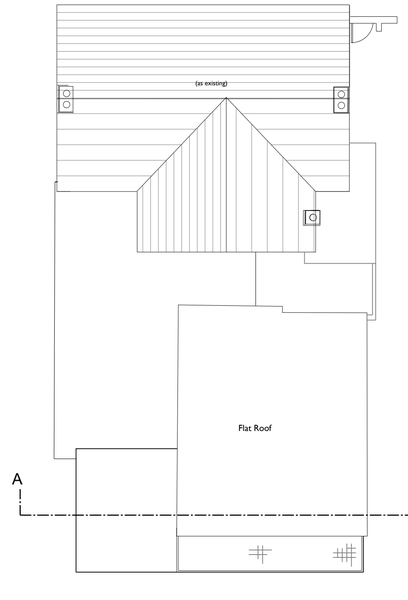
GROUND FLOOR PLAN



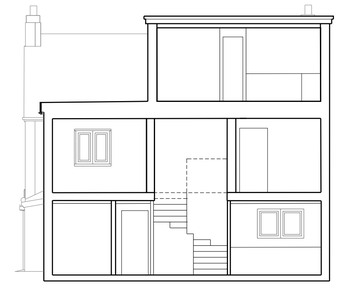
FIRST FLOOR PLAN



SECOND FLOOR PLAN

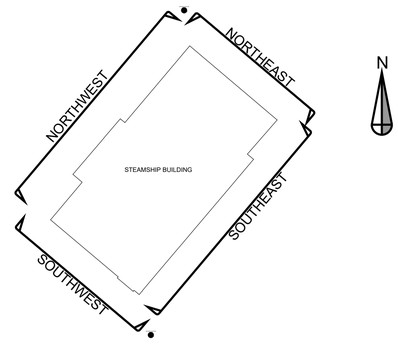


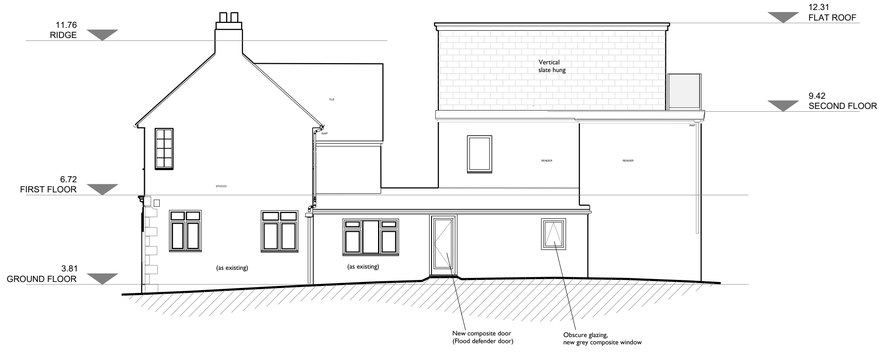
ROOF PLAN



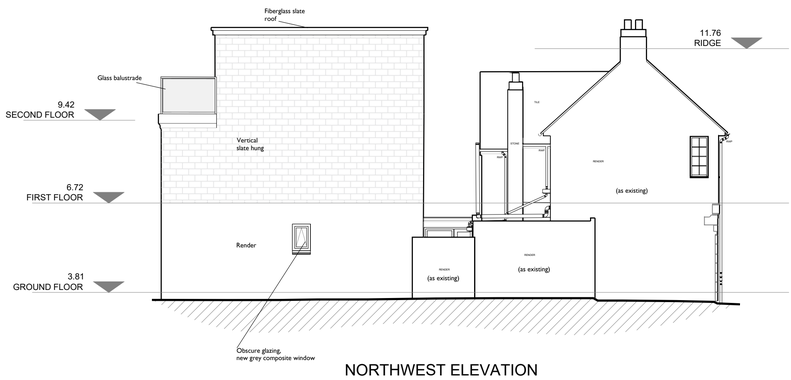
SECTION A-A

Key:

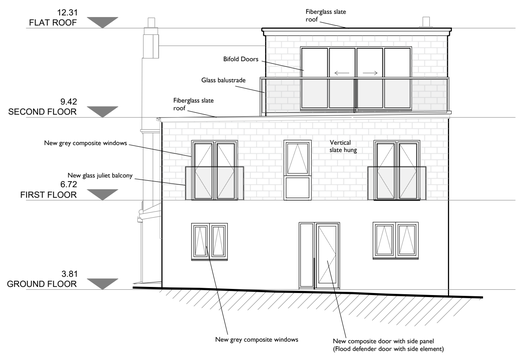




SOUTHEAST ELEVATION

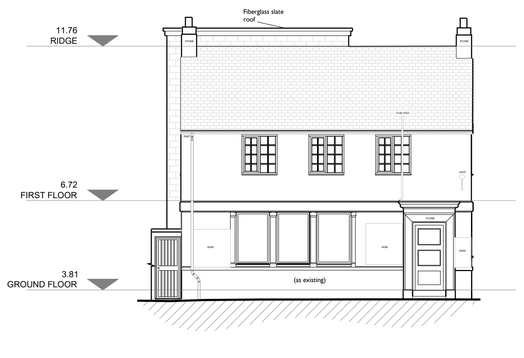


NORTHWEST ELEVATION



NORTHEAST ELEVATION

SOUTHWEST REAR ELEVATION



SOUTHWEST FRONT ELEVATION

Scale 1:100 @ A1

0 1 2 3 4 5 10m

rlt architects

Revisions

No.	Date	Revision	Drawn	Checked
A	09.03.23	Amendements to suit consultations' responses	AG	RLT

Notes

1. This drawing is the copyright of the architects and may not be reproduced without licence.
2. This drawing should not be scaled for construction purposes, only figured dimensions worked from.
3. All dimensions and levels are to be checked on site prior to commencement of any work and any discrepancies to be reported to the architect.
4. This drawing is to be read in conjunction with all relevant architects' and engineers' drawings and specifications.
5. The contractor is recommended to visit the site before tendering to ascertain all local conditions and restrictions likely to affect the works. No claims arising from failure to do so will be considered.
6. Tenders must include for all works described or being apparent on the drawings or can reasonably inferred as being necessary for the proper execution of the works.

Stage	Planning
Client	IOS Steamship Company
Project	Steamship House, Hugh Town, IOS, TR21 0LJ
Title	Proposed Plans, Elevations and Section A-A
Scale/s	1:100@A1
Date	Dec 2022
Drawn	DC
Checked	RLT
Project No.	2021/2634
Drawing No.	2021/2634/D002
Rev.	A

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