Statement of Environmental Effects of Inclined Lift Development for

Dawn & Garry Sexton, 4 Notting Lane COTTAGE POINT 2084

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1. Introduction:

This report has been prepared as part of a development application to Northern Beaches Council to erect an inclined lift inside the northern boundary of 4 Notting Lane Cottage Point 2084,which will traverse from atop the retaining wall on the western side of the Property's main residence, then down its northern side of the property (See **Appendix v** for Plan) to within a metre of the eastern boundary of the property. This is to allow ease of travel between the upper and lower levels of the property including providing disabled access to the waterfront. The aim of this report is to assess and substantiate compliance of the proposal with the applicable planning provisions and to identify the effect of the proposal on the locality.

2. Locality and Site:

The site is Lot 1 DP 586163 on the eastern side of Notting Lane, a dead end lane running along the eastern side of the Cottage Point promontory and adjoining Cottage Point Road. The site runs from Notting Lane downhill to Coal and Candle Creek. The site slopes at approximately 40 degrees from Notting Lane to the water and is roughly rectangular in shape with an area of 1098 square metres. The property is zoned E4 Environmental Living, and has had a residence on site since the 1940's. The proposal maintains the existing land use of housing, and does not include any prohibited development. The site contains environmental features including rock outcrops, however these features are retained and not unreasonably impacted upon by the proposed development with no tree removal and no mechanical excavation. Adjoining the property on the northern side is timber and metal house built around 2013 at 3A Notting Lane, Cottage Point.

Cottage Point is NOT connected to town water or sewerage. Fresh water is provided by on-site water tanks (40,000 litres) and all "black & grey" water is treated on site via an "enviro-cycle" that is serviced by Oliver Higgins Pty Ltd.

3. Existing Structures on the land:

Erected on the site are a two storey residence , a two car garage, a separate cottage at the top of the block at the Notting Lane boundary and a boathouse constructed at the waterfront on the south east corner of the block.

4. Proposal:

The proposal involves the erection of a steel rail on concrete pad footings. Fitted to the track is an aluminium carriage (600mm x 1200mm) capable of carrying 3 people (load capacity 275 kilograms). The carriage is 1150mm high and has an onboard 3 phase electric motor with an onboard switch allowing intermediate stopping anywhere along the track. Keyed switches at the top, middle and bottom of the run provide security of use, and automatic stop mechanisms will be fitted at the ends of the track. The carriage is fitted with a "fail safe" brake. Power supply is via an allocated circuit from the property's distribution board. The lift will be provided and installed by Coastal View lifts.(See **Appendix vi** for a copy of their quotation)

In deciding the location of the inclined lift on the site, a number of considerations had to be taken into account.

- Due to various constraints, namely existing structures and topography, the only practical route for an inclinator lays along the northern boundary. (See **Appendix iii**)

- There will be no overshadowing of neighbouring properties.

- The corridor abutting the northern boundary allows for a continuous rail to be constructed from the property's upper level down to the waterfront.

- The proposed route of the rail will closely follow the fall of the land and so be, by and large, silhouetted by the existing intervening fence. This will minimise any view loss from neighbouring properties or privacy concerns.

Note: A full height privacy screen will be affixed to the northern face of the Inclinator carriage so as to ensure passengers cannot overlook the neighbouring property

The proposed development will have minimal visual impact on the scenic quality of the area. By selecting the northern boundary position, the Inclinator will not be visible from the street front and will be largely screened from the waterfront by trees. Additionally the rail will be galvanised and the carriage powder coated in dark grey (Monument) to soften its appearance.

The bulk of construction will take place off site. The minor quantity of material requiring removal will be loaded directly onto vehicles for disposal at the local tip. It is expected that sections of the inclined lift rail will be carried onto the site and fitted together. The carriage will be delivered and assembled onto the rail once the rail is completed. No storage is required.

There is a consideration of noise level to be taken into account. The electrically operated, geared motor driving the inclination carriage will not be entirely silent, but the level of noise is quite low and the machine operates at a slow pace. It is understood that the machine operates at approximately 50 decibels (about the same as an electric toothbrush), hence the noise disturbance is expected to be minor.

The effect of the development on fauna will be minimal. The elevated rail means that the animals (if any) that traverse the land, will not be compromised. Pad footings will be at ground level with 150 x 150 mm steel columns supporting the rail.

This proposal will aid access between the main house and the foreshore. Access for people with physical disabilities will be greatly enhanced by the installation of the inclined lift. The alternate access to the waterfront is via approximately 70 steps.

5. Warringah Local Environment Plan 2011

The Warringah Local Environment Plan 2011 requires that the following objectives need to be considered in this development application:

5.1 Environmental Living
5.2 Acid sulphate soils
5.3 Development on sloping land

5.1 The property is zoned E4 Environmental Living. The installation of an inclined lift will have minimal visual impact as the carriage will be dark grey and the rail is galvanised and narrow in dimension. The footings are minor and will remain at ground level, with galvanised columns to support the rail where necessary. The natural landscape will be maintained with minimal disturbance to bushland and rock outcrops.

5.2 The proposed development is located on Acid Sulphate Soils Type 5. It does require the hand digging of up to 9 footings to a maximum depth 600 mm. As such it is not considered that the proposal is likely to lower the water table below 1 metre AHD on adjacent Class 1, 2 ,3 or 4 land.

5.3 The entire site slopes at more than 15 degrees, so Development on Sloping Land objectives need to be considered. The property is zoned Area C on the Landslip Risk Map and as such requires that a Geotechnical Report accompanies this Development Application.

An updated Geotechnical Report from Crozier & Associates supporting the construction of the Inclinator is attached in the **Appendix i**

6. Warringah Development Control Plan The Warringah Development Control Plan 2011 requires that the following objectives need to be considered for this Development Application:

6.1 Part B Built Form Controls

6.2 D1 Landscape Open Space and Bushland Setting

6.3 E3 Threatened species, populations, ecological communities listed under State or Commonwealth legislation, or High Conservation Habitat

6.4 E5 Native Vegetation

6.5 E7 Development of Land Adjoining Public Open Space

6.6 E8 Waterways and Riparian Lands

6.7 E10 Landslip Risk E7 Development on land adjoining public open space

6.1 Part B Built Form Controls - non-compliance.

15 metre front set back control.

The rail of the inclined lift will begin approximately three metres to the west of the retaining wall situated to the west of the main residence and run down abreast of the northern boundary for 34 metres to approximately 1 metre from the waterfront boundary. Its positioning near the northern boundary means it can closely follow the fall of the land will be silhouetted by the intervening fence so minimising the size and bulk of the construction.

900 mm side set-back control.

The inclined lift's rail will transverse the main residence on its northern side, descending from a landing situated near its upper northwest corner down past the lower level's balcony on its eastern facade. While the lift's supporting rail will achieve the side boundary setback of 900 mm for the

majority of its length , the position of main residence, 820mm from the northern boundary at its closest point, dictates that the rail will lay within the side setback area for approximately 10 metres, as it passes the house.

The regulations covering the inclined lift also require that a distance of 225 millimetres be maintained between the inclinator's carriage and all other structures. To facilitate this, the northwest corner of the main residence will be bevelled so as to increase its separation from the boundary to 980mm at its closest point (See **Appendix vii**) . The fence laying within the property's northern boundary will also be lowered for approximately 5 metres of its length to permit the carriage to travel without encumbrance on its northern side. (See **Appendix viii**)

Note: The fence was built prior to the construction of the house on 3A Notting Lane and is situated entirely within the Applicant's land. It was paid for and is the property of the Applicant.

6.2 One of D1 Landscape Open Space and Bushland setting objectives is to conserve and enhance indigenous vegetation, topographical features and habitat for wildlife. In compliance with this regulation, no trees, shrubs or rock outcrops will be removed during the construction of the inclined lift. The colour and form of the proposed development will not adversely affect the streetscape as it will not be visible at the road level in Notting Lane.

6.3 E3 Threatened species, populations, ecological communities listed under State or Commonwealth legislation, or High Conservation Habitat objectives are considered Not Applicable (As per open DA 2013/0677) as the block is fully developed with the inclined lift traversing established lawns, garden beds and paved areas. (See **Appendix iv** for photos.)

6.4 E5 Native Vegetation objectives are considered Not Applicable as above and as per open DA 2013/0677

6.5 Since the property adjoins Ku-ring-gai National Park, E7 Development on land adjoining public open space objectives need to be considered. By siting the inclined lift on the northern boundary of the property, it will not be visible from the Notting Lane boundary of the National Park. The dark colour of the inclined lift and the fringing tree line will be utilised to minimise the impact of the development when viewed from the water.

View of proposed Inclinator site as viewed from the water; the blue line shows approximate path of carriage

6.6 The property at 4 Notting Lane, Cottage Point is identified on DCP Map Waterway and Riparian Lands, so E8 Waterways and Riparian Lands objectives need to be addressed.

Waterways Impact Statement

# Proposed Earthworks	Minor footings
# Extent of Operations	Installation of Inclined Lift Activities Sediment and Erosion control Stormwater disposal in accordance with Council requirements i.e. discharge to Coal & Candle Creek

Given that the proposal to erect an inclined lift for residential purposes is a very minor development, it is not considered that the proposal will negatively impact upon the Coal & Candle Creek waterway or its habitat. During hand digging of footings, sedimentation fencing will be employed. The residential use of the property will not result in pollutants which would unreasonably diminish the amenity of the adjacent waterways. The installation is not likely to produce an excessive amount of atmospheric, liquid or other emissions. Rainwater runoff will not be altered by the construction. Land within this area is not flood prone.

6.7 E10 Landslip Risk objectives require that the project is justified in terms of geotechnical stability. A Geotechnical Report from Crozier & Associates accompanies this application, and the development is classed as a minor development. The design of the construction inherently limits water collection, and so provides no adverse impact resulting from stormwater discharge and no adverse impact on existing subsurface flow conditions.

7. Bushfire Prone Land.

In complying with RFS requirements, the entire block is treated as an Internal Asset Protection Area within an Asset Protection Zone. This requires the regular removal of leaf litter build up and introduced weeds. A Hazard Reduction burn was carried out by RFS on the 20 metre strip of land adjoining our western boundary of the property on March 12, 2016. Leaf litter and weeds are constantly managed. The inclined lift will traverse the length of the property which must be considered to be through Bushfire Prone Land due to the proximity of the National Park. The inclined lift complies with the construction requirements of the site's BAL 19/29 rating. Materials consist mainly of steel and aluminium, a small amount of electrical cabling, and concrete footings. Hence, the bulk of the material used in constructing the Inclined Lift is fire-proof. A Compliance Certificate - Inclinator (inclined lift) is submitted by Sydney Bush Fire Consultants Pty Ltd, stating that there are no bushfire safety related impediments to the approval of the works proposed. (See **Appendix ii**)

8. Summary: The merits of this application have been identified in this assessment under Section 79C of the Environmental Planning & Assessment Act 1979, Warringah Local Environmental Plan 2011 and Warringah Development Control Plan. Consideration has been given to the design to ensure that adjoining residents continue to enjoy uninterrupted solar access, privacy & views with minimal noise disturbance. The impact of the proposed development on the surrounding area has been carefully considered. Overall it is believed that the aims and objectives of Council's development controls are achieved.

Supporting Reports Appendix

i) Geotechnical Report

ii) Bushfire Assessment Report; Compliance Certificate

iii) Alternate positions considered in selecting the site of the Inclined Lift

iv)) Lawn area traversed by the proposed Inclined Lift

v) Site Plan showing position of Inclinator

vi) Coastal View Lifts Quotation

vii) House outer wall modification

viii) Site and North Boundary Surveys

iii) Alternate positions considered in selecting the site of the Inclined Lift

As mentioned in the main body of this statement, consideration was given to alternate sites for the positioning of the Inclined Lift, however these proved impractical. A summary of these findings is as follows:

i) The main residence is situated approximately 10 metres from the waterfront, dictating that the inclined lift be situated to its north or south if it were to reach from the upper level to the waterfront.

ii) Immediately to the south of the main residence, there is an existing concrete staircase that allows the only access from the upper level to the waterfront and as such must be retained. This then means that the inclined lift would have to be situated on either the southern or northern boundaries.

ii) While serious consideration was given to positioning the Inclined Lift on the Southern Boundary, it proved to be impractical given the major safety and engineering issues involved. Specifically:

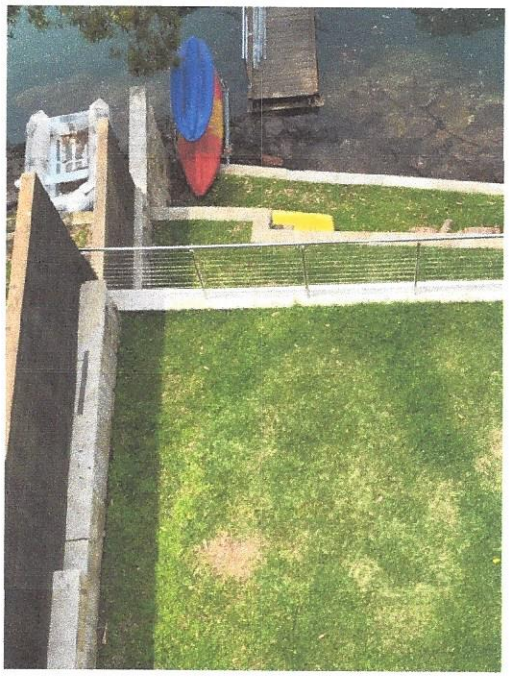
A Landing would need to be constructed on the southern side of the Garage situated on the Upper level. Due to the steep slope of the land, the top landing would have to be sited adjacent to the south east corner of the Garage, some five metres above the natural level of the land creating severe safety concerns.

Not withstanding this, the path of the lift's rail would mean that it would then need pass through the deck laying below and between the Garage and the waterfront. This would require the removal of 1.3 metres of decking timber on the southern end of the deck, removal and repositioning of a least one 6" RSJ running the length of the deck, the demolition of parts of a retaining wall immediately west of the deck, the emptying and repositioning of three 7000 litre enviro-cycle tanks and the re-plumbing of these tanks including the fixed inflow pipes from the top cottage and the cutting of new access doors in the deck and repairing of the existing access doors.

Finally, siting the rail along the southern boundary would mean the repositioning of the main sewerage pit currently situated near the waterfront boundary, on the southern side the boatshed. This would be a major project, given it contains two three phase maceration pumps, and a complex underground sewerage pipe network designed to capture the property's black and grey water and pump it up some twenty metres to the enviro-cycle tanks situated under the deck (mentioned above). The sewerage system is gravity fed, dictating that the pit must be situated at the property's low-point, so actually moving the pit in the first place is highly problematic.

Given the above, the decision was made to propose that the Inclined Lift be positioned along the northern boundary.

iv) Lawn area traversed by the proposed Inclined Lift



Approximate path of Inclined Lift (viewed from main residence's balcony) and a wider view of the lawn area