

# New Zealand Institute of Surveyors

## Cadastral Law Examination

### Research Component 2017 – Model Answers

#### Question 1

How would you explain to your client what the differences are regarding “avulsion”, “accretion” and “erosion” and what the legal requirements, if any, would be when dealing with all three in your survey? (6 marks)

#### Definitions:

“Accretion” – “where water recedes gradually and imperceptibly from the land, or where a river gradually and imperceptibly moves away from one bank, adding to the land by depositing shingle and silt”. (Source LINZS20005 – Standard for Title Adjustments Arising from Water Boundary Changes).

“Erosion” – is usually the opposite of “accretion” whereby land is lost.

“Avulsion” – “where the change in the physical boundary between land and water was not gradual and imperceptible, but either sudden or perceptible as it was occurring”. ( Source LINZS20005 – Standard for Title Adjustments Arising from Water Boundary Changes and also LINZG20710 – Guideline for Dry Stream or River Bed).

#### Legal Requirements:

“Accretion” – a title incorporating land claimed as “accretion” must only be issued to an adjoining owner when the following requirements are met (Source LINZS20005 – Standard for Title Adjustments Arising from Water Boundary Changes):

- a) the application for title must be made in an acceptable form; and
- b) the application must be supported by adequate survey definition; and
- c) the applicant must establish that the doctrine of accretion applies; and
- d) the application must be supported by evidence to establish that accretion has occurred; and
- e) notice is given to all interested parties; and
- f) any evidentiary disputes are resolved.

“Erosion” – when erosion has occurred these eroded areas must be excluded from the parcel being surveyed and shown as a “hydro” parcel in the Cadastral Survey Dataset (Source LINZG65700 – Interpretation Guide to Rules for Cadastral Survey 2010 (Section 26)).

“Avulsion” – when avulsion occurs in the case of a non-navigable river or stream, a person claiming ownership may apply to the Registrar-General of Land (RGL) to have a computer register issued for the land that was formerly under water (Source LINZG20710 – Guideline for Dry Stream or River Bed). The following requirements are to be met:

- a) the land has become dry by avulsion,
- b) the *usque ad medium filum aquae* presumption applied to the land in question when it was alienated from the Crown,
- c) the river was non-navigable and non-tidal,
- d) the land is not already comprised in a computer register,
- e) the land is not subject to the Marine and Coastal Area (Takutai Moana) Act 2011, and either
- f) the applicant has a right under the *usque ad medium filum aquae* presumption and there is no other person in possession of the land with a better claim for title than the applicant's, or
- g) the applicant is in adverse possession and has been in continuous possession, personally and through the predecessors in title, for at least 12 years to the present day.

## Question 2

Also explain to your client what the differences are between “esplanade reserves” and “esplanade strips”. (4 marks)

### Definitions:

“Esplanade Reserve” – means a reserve within the meaning of the Reserves Act 1977 –

- a) which is either –
  - (i) a local purpose reserve within the meaning of Section 23 of that Act, if vested in the territorial authority under Section 239; or
  - (ii) a reserve vested in the Crown or a regional council under section 237D; and
- b) which is vested in the territorial authority, regional council, or the Crown for a purpose or purposes set out in Section 229

“Esplanade Strip” – means a strip of land created by the registration of an instrument in accordance with Section 232(2)(d) of the Resource Management Act 1991 for a purpose or purposes as set out in Section 229 of that Act.

### Significant Differences:

“Esplanade Reserve”

- a) land is taken out of the parcel being surveyed and vested in the territorial authority, regional council, or the Crown.
- b) landward boundary is fixed as a right-line or irregular boundary.
- c) the adjoining land will lose its riparian status.
- d) is shown as a primary parcel in the Cadastral Survey Dataset.

“Esplanade Strip”

- a) land that is still part of the parcel being surveyed and the ownership of the land does not change.
- b) legal instrument between the landowner and the territorial authority created under Section 232(2)(d) of the Resource Management Act 1991 that is registerable against a computer register under the Land Transfer Act 1952.
- c) landward boundary is an irregular boundary of fixed width that moves with its associated water boundary (Source LINZS65003 - Rules for Cadastral Survey 2010 (Rule 6.6(c))).
- d) is shown as a non-primary parcel (ie. secondary or tertiary) in the Cadastral Survey Dataset.



### Question 3

Identify the areas of “accretion” and “erosion” on a copy of the attached plan that lies within, or adjoining, Lots 1, 2 and 3. (2 marks)

#### Response:

Refer to Figure 1 (appendixed). The plan shows four significant areas of erosion (coloured blue) and five significant areas of accretion (coloured red) which affects Lots 1, 2 and 3. There is also an extremely small area of accretion (coloured red) which affects Lot 3 which could also be considered.

### Question 4

Your client originally advised that he would prefer not to claim “accretion” due to the lengthy and expensive process that is required to be completed. Illustrate on a copy of the attached plan the new legal boundary along Gollum River for Lots 1, 2 and 3 where accretion is not claimed. Also state how these boundaries should be depicted on your survey plan and reference these requirements to the specific rules of the Rules for Cadastral Survey 2010. (5 marks)

#### Response:

Refer to Figure 2 (appendixed). The plan shows Lots 1, 2 and 3 as not including any areas identified as “accretion” or “erosion” that has been highlighted in Figure 1 (Question 3).

The boundaries for Lots 1, 2 and 3 fronting the areas identified as “accretion” are to be depicted in the Cadastral Survey Dataset as a water boundary in its previously recorded position. Refer to Rule 6.7(b) of the Rules for Cadastral Survey 2010. These water boundaries are to be depicted as solid thick lines as per Table 13 within Rule 12.3 of the Rules for Cadastral Survey 2010.

The boundaries for Lots 1, 2 and 3 fronting the areas identified as “erosion” are to be depicted in the Cadastral Survey Dataset as a water boundary as fixed in the new survey. These water boundaries are to be depicted as solid thick lines as per Table 13 within Rule 12.3 of the Rules for Cadastral Survey 2010.

These water boundaries are to be shown as irregular lines at a scale that “clearly shows its shape and relationship to other boundaries” as outlined in Rules 3.4(a), 9.6.7(a) and 10.4.5(a) of the Rules for Cadastral Survey 2010.

Where the water boundary is depicted in its former state, a note should be added to the survey plan stating that it is adopted along with the source adoption (ie. plan reference). In addition, a note should be added along the lines “due to accretion, parcel boundary and present water boundary are not coincident” to comply with Rules 9.6.7(b) and 10.4.5(b) of the Rules for Cadastral Survey 2010.

For all adopted water boundaries, the accuracy class, source Cadastral Survey Dataset type and number are required, whilst for all new water boundaries, the accuracy class and a description of the physical features where it defines a water boundary are required to comply with Rule 9.4 of the Rules for Cadastral Survey 2010.

In addition, the four areas identified as “erosion” (coloured blue) must be shown as separate residue parcels in the Cadastral Survey Dataset using irregular lines to comply with Rule 6.7(c) of the Rules for Cadastral Survey 2010. These residual parcels are to be described as “erosion”, as required by Rules 9.6.3(h)(iii) and 10.4.2(f)(iii) of the Rules for Cadastral Survey 2010, with the parcel intent being “hydro”. Areas are not required for these “erosion” parcels however sometime it is good practice to add them as user added text.

The name, or description, for the river (eg. Gollum River) must be shown on the survey plan, as required by Rule 9.6.3(h)(iv) of the Rules for Cadastral Survey 2010.

Sufficient vectors are required in the Cadastral Survey Dataset for each new intersecting point on a water boundary to enable the survey relationship between all points and marks to be ascertained in accordance with the relevant accuracy standards. This will comply with Rule 9.6.13(c) of the Rules for Cadastral Survey 2010. These new intersecting points are to be “defined by survey” to comply with Rule 6.2(a)(i) of the Rules for Cadastral Survey 2010 and can be depicted as an unmarked point, as illustrated in table 12 within Rule 12.2 of the Rules for Cadastral Survey 2010.

## Question 5

Sketch on a copy of the attached plan the location of the “esplanade strips” to be laid out to meet the requirements of the condition of the resource consent (subdivision), based on (4) above. Also state how the landward boundaries for the “esplanade strips” should be depicted on your survey plan. (5 marks)

### Response:

Refer to Figure 3 (appendixed). The provision of “esplanade strips” where “accretion” is not being claimed is a contentious issue amongst surveyors and staff at Land Information NZ. Generally “esplanade strips” should be laid out alongside the current position of the river bank. It therefore also makes common sense that where the “accreted” area is wider than the specified width of the “esplanade strip” then no “esplanade strip” shall be required. This could create a patchwork of “esplanade strips” along the water boundaries for the new lots.

The current policy with Land Information NZ is to accept survey plans showing new “esplanade strips” along the adopted river banks that have been annotated, or shown, as being in a different position from the current river bank where “accretion” has been identified. The purpose by the territorial authority to provide a continuous “esplanade strip” within Lots 1, 2 and 3 would then be met.

At present there is no case law on how best to deal with water boundaries and “esplanade strips” that would address this type of scenario.

Given the above there are two acceptable answers:

- a) showing a continuous “esplanade strip” at a width of 10.00 metres along the water boundaries for Lots 1, 2 and 3 that has either been adopted river banks due to accretion, or current river banks due to erosion as shown in Figure 3.
- b) only showing an “esplanade strip” at a width of 10.00 metres where the current river bank is within or adjoining the previously defined legal water boundary.

The survey plan must depict three “esplanade strips” as a non-primary parcel with a parcel type being Esplanade Strip, a unique parcel identifier being “A”, “B” etc. and a Cadastral Survey Dataset type and number to comply with Rules 5.5.1(a), 5.5.2 and 5.5.4 of the Rules for Cadastral Survey 2010. This is also covered in Rules 9.6.3(d) and 10.4.2(d) of the Rules for Cadastral Survey 2010.

The landward boundaries for the three “esplanade strips” must be depicted as irregular boundaries on the survey plan at a width of 10.00 metres except where it coincides with an underlying parcel boundary. This will comply with Rule 6.6(c) of the Rules for Cadastral Survey 2010.

These irregular boundaries are to be shown as irregular lines at a scale that “clearly shows its shape and relationship to other boundaries” as outlined in Rules 3.4(a), 9.6.8 and 10.4.6 of the Rules for Cadastral Survey 2010.



The width of each “esplanade strip” that is depicted in the Cadastral Survey Dataset must be shown on both the diagram of survey and the diagram of parcels as outlined in Rules 9.6.14(a)(iii) and 10.4.9(b) of the Rules for Cadastral Survey 2010.

Sufficient vectors are required in the Cadastral Survey Dataset for each new intersecting point on an irregular boundary to enable the survey relationship between all points and marks to be ascertained in accordance with the relevant accuracy standards. This will comply with Rule 9.6.13(c) of the Rules for Cadastral Survey 2010. These new intersecting points are to be “defined by survey” to comply with Rule 6.2(a)(i) of the Rules for Cadastral Survey 2010 and can be depicted as an unmarked point, as illustrated in table 12 within Rule 12.2 of the Rules for Cadastral Survey 2010.

## Question 6

Your client has however now decided that perhaps claiming any “accreted” areas would be in his best interests. Explain to your client the steps he would need to undertake to achieve this. Illustrate on another copy of the attached plan the new legal boundary along Gollum River for Lots 1, 2 and 3 where accreted land is claimed. Again state how these boundaries should be depicted on your survey plan and reference these requirements to the specific rules of the Rules for Cadastral Survey 2010. (6 marks)

### Legal Requirements:

“Accretion” – a title incorporating land claimed as “accretion” must only be issued to an adjoining owner when the following requirements are met (Source LINZS20005 – Standard for Title Adjustments Arising from Water Boundary Changes):

- a) the application for title must be made in an acceptable form; and
- b) the application must be supported by adequate survey definition; and
- c) the applicant must establish that the doctrine of accretion applies; and
- d) the application must be supported by evidence to establish that accretion has occurred; and
- e) notice is given to all interested parties; and
- f) any evidentiary disputes are resolved.

### Process:

Refer to the LINZS2005 - Standard for Title Adjustments Arising from Water Boundary Changes, LINZG20711 – Guideline for Accretion Claims, and Section 49 of the Cadastral Survey Act 2002.

The process requires the landowner, or a solicitor acting on behalf of the landowner, to make an application to the Registrar-General of Land who will assess the application, and correct the Computer Freehold Register to include the “accreted” areas, pursuant to Section 80 of the Land Transfer Act 1952. In order for the Registrar-General of Land to accept and grant the application, he must be satisfied with the following three issues:

- a) that the “accretion” is in fact “accretion” and that its gradual and imperceptible,
- b) that the doctrine of “accretion” was not excluded in the original grant / conveyance,
- c) that the boundary is moveable and is defined as the water’s edge.

Key points to be noted are as follows:

- a) the application is executed by the applicant in accordance with Section 157 of the Land Transfer Act 1952,
- b) the application complies with the Land Transfer Regulations 2002,
- c) adequate survey definition by means of a survey plan is shown as a parcel which includes the “accreted” areas,

- d) that the survey plan is prepared in terms of Section 167(1) of the Land Transfer Act 1952 and the Surveyor-General's Rules for Cadastral Survey 2010,
- e) the survey plan shows all the affected parcels in the applicant's current computer register,
- f) establish that the land in question has a moveable water boundary
- g) the doctrine of "accretion" was not excluded at the time of the original grant or conveyance of the land,
- h) the area claimed is stable and has formed gradually and imperceptibly,
- i) the application should refer to, and supply copies of, the records held by Land Information NZ,
- j) the applicant provide a statutory declaration setting out the circumstances surrounding the movement in the position of the water boundary,
- k) a statutory declaration by a disinterested person who is familiar with the land which corroborates the application,
- l) an expert testimony by a qualified personnel regarding soil composition of the area which corroborates the applicant's statutory declaration,
- m) no supporting evidence is required in respect of any "erosion",
- n) check to see whether the adjoining land, or the bed of the river, or stream is subject of Treaty of Waitangi settlement negotiations,
- o) give notice to all interested parties (ie. Treaty settlement claimants, Maori Land Court, Commissioner of Lands, Department of Conservation and the relevant local authorities).

### **Response:**

Refer to Figure 4 (appendixed). The plan shows Lots 1, 2 and 3 as including all the areas identified as "accretion", but not including any areas identified as "erosion" that has been highlighted in Figure 1 (Question 3). This means that the new legal water boundary along Gollum River will follow the current positions of the true left bank, or the true right bank, as fixed using RTK GPS equipment.

Also note that one cannot claim "accretion" where it affects a legal road. Therefore a portion of "accretion" in the north-east corner of Lot 2 cannot be included within that new lot. Similarly, at the northern end of the boundary alignment between Lot 3 and the adjoining property, Part Section 7, one cannot claim "accretion" to the west of that boundary alignment.

The boundaries for Lots 1, 2 and 3 fronting the areas identified as "erosion", and including the "accreted" areas, are to be depicted in the Cadastral Survey Dataset as a water boundary as fixed in the new survey. These water boundaries are to be depicted as solid thick lines as per Table 13 within Rule 12.3 of the Rules for Cadastral Survey 2010.

These water boundaries are to be shown as irregular lines at a scale that "clearly shows its shape and relationship to other boundaries" as outlined in Rules 3.4(a), 9.6.7(a) and 10.4.5(a) of the Rules for Cadastral Survey 2010.

For the adopted water boundaries fronting the "eroded" areas, the accuracy class, source Cadastral Survey Dataset type and number are required, whilst for all new water boundaries, the accuracy class and a description of the physical features where it defines a water boundary are required to comply with Rule 9.4 of the Rules for Cadastral Survey 2010.

In addition, the four areas identified as "erosion" (coloured blue) must be shown as separate residue parcels in the Cadastral Survey Dataset using irregular lines to comply with Rule 6.7(c) of the Rules for Cadastral Survey 2010. These residual parcels are to be described as "erosion", as required by Rules 9.6.3(h)(iii) and 10.4.2(f)(iii) of the Rules for Cadastral Survey 2010, with the parcel intent being "hydro". Areas are not required for these "erosion" parcels however sometime it is good practice to add them as user added text.

The six areas identified as "accretion" that are being claimed must be included within the new parcels for Lots 1, 2 and 3 and described as "accretion", as required by Rules 9.6.3(h)(ii) and 10.4.2(f)(ii) of the Rules for Cadastral Survey 2010. In addition, areas are required for each

identified portion of “accretion” that are being claimed to comply with Rule 5.3(a)(iii) of the Rules for Cadastral Survey 2010.

The former water boundaries, where “accretion” has occurred are to be shown as an estate boundary line on the survey plan in accordance with Rules 9.6.3(h)(i) and 10.4.2(f)(i) of the Rules for Cadastral Survey 2010. The line style for these estate boundaries are to be depicted as shown in Table 13 within Rule 12.3 of the Rules for Cadastral Survey 2010.

The hydro parcel affected by the “accretion” to be claimed and be included within Lots 1, 2 and 3 needs to be captured in the Cadastral Survey Dataset as a balance hydro parcel. It does not need to be shown in full on the survey plan.

The name, or description, for the river (eg. Gollum River) must be shown on the survey plan, as required by Rule 9.6.3(h)(iv) of the Rules for Cadastral Survey 2010.

Sufficient vectors are required in the Cadastral Survey Dataset for each new intersecting point on a water boundary to enable the survey relationship between all points and marks to be ascertained in accordance with the relevant accuracy standards. This will comply with Rule 9.6.13(c) of the Rules for Cadastral Survey 2010. These new intersecting points are to be “defined by survey” to comply with Rule 6.2(a)(i) of the Rules for Cadastral Survey 2010 and can be depicted as an unmarked point, as illustrated in table 12 within Rule 12.2 of the Rules for Cadastral Survey 2010.

## Question 7

Clearly demonstrate how and where the “accretion” to the road would lie in the area where Gollum River meets Gandalf Road. (2 marks)

### Definitions:

Section 315(4) of the Local Government Act 1974 states that:

“Every accretion to any road along the bank of a river or stream or along the mean high-water mark of the sea or along the margin of any lake caused by the action of the river or stream or of the sea or lake shall form part of the road”.

Section 315(5) of the Local Government Act 1974 states that:

“Where any road along the bank of a river or stream or along the mean high-water mark of the sea or along the margin of any lake is eroded of the river or stream or of the sea or lake, the portion of road so eroded shall continue to be a road”.

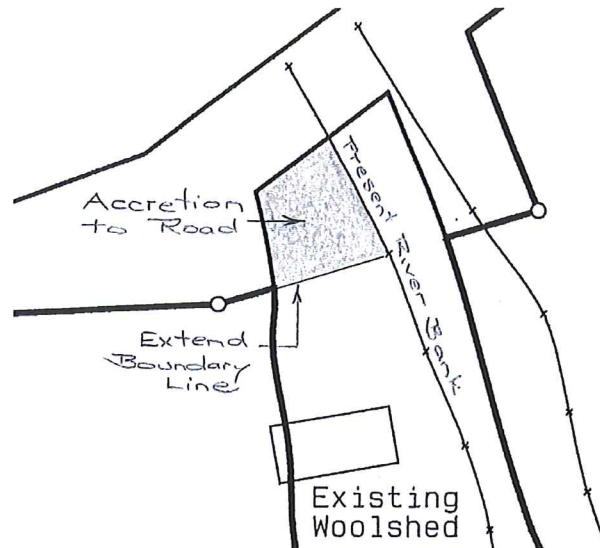
### Response:

Refer to diagram on next page. The survey has identified that “accretion” has occurred in the area where Gollum River meets Gandalf Road. Therefore to comply with Section 315(4) of the Local Government Act 1974, a portion of Gandalf Road will need to become “legal road”.

To determine the new road boundary fronting Lot 2 the fairest solution is to distribute the portion of water boundary frontage on a pro-rata rule to ensure that equitable division of accreted land is given to all parties. This method of distribution was formalised in *Riddiford v Feist* in 1902.

In this example if this was undertaken, the new road boundary fronting Lot 2 will probably deviate in a more northerly direction. However because the deviation is minimal, the more practical solution would be to extend the road boundary alignment from the existing road boundary frontage for Lot 2 towards the existing road boundary frontage of Lot 3, on the other side of Gollum River. The extended road boundary alignment will be right-lined with a new “unmarked” position where it intersects the new water boundary.





#### Footnote:

A similar situation can also be applied to the “accreted” area between Lot 3 and Part Section 7. Again the more practical solution would be to extend the boundary alignment to the present river boundary.

#### Question 8

As shown on the attached plan, an existing farm structure, namely a large operational woolshed, lies in the eastern portion of Lot 2 and straddles the boundary of Gollum River as fixed in the November 1911 survey. Part of the woolshed lies within ten metres of the current river bank. Explain what implications this structure would have in respect to the layout of an “esplanade reserve”, or an “esplanade strip” and how this can be addressed? (3 marks)

#### Response:

Generally there are no hard and fast rules governing encroachment of any significant structures within either an “esplanade reserve”, or an “esplanade strip”. For some territorial authorities, consultation would be required with them in order to reach a compromise, or solution.

#### Esplanade Reserves:

As covered in Question 2, “esplanade reserves” are taken out of the parcel being surveyed and vested in the territorial authority, regional council, or the Crown. The landward boundary is established as either a series of right-lines, or an irregular boundary, that would not move in relation to the adjacent water boundary as a result of further “accretion” or “erosion”.

Section 77(1) of the Resource Management Act 1991 allows for “esplanade reserves” to be laid out at a width greater or less than 20 metres. For “esplanade reserves” with irregular landward boundaries, this means that the nominated width set by the territorial authority would be constant. However for “esplanade reserves” that will have a series of right-lined landward boundaries, the nominated width set by the territorial authority will be the minimum width.

In this example the large operational woolshed would lie within the area to be vested as an “esplanade reserve”. It is assumed that a building code of compliance has been granted by the territorial authority for this structure.

There are various options that could be considered. The more practicable solution would be to consult with the territorial authority and attempt to obtain a reduction in the width of the “esplanade reserve” in the vicinity of that structure. This would avoid any encroachment of the structure within the “esplanade reserve” and should not compromise the associated farming



activities. If this is the case the landward boundaries of the “esplanade reserve” will need to be ground marked, as stated in Rule 7.1(a) of the Rules for Cadastral Survey 2010.

A second option is to provide an easement over the encroachment portion of the structure. This can be achieved by using the provisions of Section 48 of the Reserves Act 1977 with the dominant tenement being the adjoining Lot 2. This easement can be surrendered at a later date should the structure be removed. A small fee may be required to be paid to the territorial authority for occupying the encroached area.

A third option is for the territorial authority to grant a lease, pursuant to Section 61 of the Reserves Act 1977, over the encroachment portion of the structure. Normally a rent would then be paid by the adjoining landowner to the territorial authority. The lease could be required to be identified on the survey plan as part of the Cadastral Survey Dataset.

A fourth option is for the territorial authority to pay compensation, pursuant to Section 237 of the Resource Management Act 1991, to force the removal of the structure.

For options 1 and 2 above, it would be good survey practice to accurately fix the corners of the structure so that the relationship, or encroachment, of that structure to the landward boundaries of the “esplanade reserve” can be determined.

#### Esplanade Strips:

As covered in Question 2, “esplanade strips” remains with the parcel being surveyed and the ownership of the land does not change. A legal instrument between the landowner and the territorial authority is created under Section 232(2)(d) of the Resource Management Act 1991 which is registerable against a computer register under the Land Transfer Act 1952.

Section 77(2) of the Resource Management Act 1991 allows for “esplanade strips” to be laid out at a width specified in the rule for the territorial authority’s District Plan. Generally “esplanade strips” will have irregular landward boundaries which needs to be laid out at the nominated width that has been set by the territorial authority in a condition of the resource consent (subdivision).

There are no laws preventing the existence of any structures on land within an area to be laid out as an “esplanade strip”. In this example the large operational woolshed would lie within the area to be laid out as an “esplanade strip”. It is assumed that a building code of compliance has been granted by the territorial authority for this large operational woolshed.

There are two options that could be considered. It should be noted that the irregular landward boundary for an “esplanade strip” would move as a result of any further “accretion” or “erosion” along the present true left bank of Gollum River. As a result the more practicable, and simplest, solution would be to allow the irregular landward boundary to run through the structure. It is also possible to stipulate a condition in the instrument for the “esplanade strip” regarding limited public access to an area around that structure, as outlined in Section 232 of the Resource Management Act 1991. This will need agreement with the territorial authority.

A second option is to consult the territorial authority and attempt to obtain a reduction in the width of the “esplanade strip” in the vicinity of the structure. This would avoid any encroachment of the structure within the “esplanade strip”. If this happens the landward boundaries for the “esplanade strip” in the vicinity of the structure will need to be established and right-lined, but not necessarily ground marked.

For the second option the new boundary points are to be “defined by survey” to comply with Rule 6.2(a)(i) of the Rules for Cadastral Survey 2010 and can be depicted as an unmarked point, as illustrated in Table 12 within Rule 12.2 of the Rules for Cadastral Survey 2010. Sufficient vectors will also be required in the Cadastral Survey Dataset for each new boundary point to enable the survey relationship between all points and marks to be ascertained in accordance with the relevant accuracy standards. This will comply with Rule 9.6.13(c) of the Rules for Cadastral Survey 2010. The downside for this option is that the landward boundaries for the “esplanade

strip” will be fixed and so cannot move with the water boundary, as a result of any further “accretion” or “erosion” along the present true left bank of Gollum River.

In both options mentioned above, it would be good survey practice to accurately fix the corners of the structure so that the relationship, or encroachment, of that structure to the irregular landward boundaries of the “esplanade strip” can be determined.

### **Summary:**

With respect to the comments provided above, every territorial authority have differing views on how and what can be done with either “esplanade reserves”, or “esplanade strips”. There are no strict right or wrong answers. There are also no laws preventing the existence of any structures on land within an area to be laid out as an “esplanade strip”.

## **Question 9**

Sketch on a copy of the attached plan the location of the “esplanade strips” to be laid out to meet the requirements of the condition of the resource consent (subdivision), based on (6) above. Also show how the landward boundaries for the “esplanade strips” should be depicted on your survey plan. (4 marks)

### **Response:**

Refer to Figure 5 (appendixed). The provision of “esplanade strips” where “accretion” is being claimed should be laid out alongside the current position of the river bank for the entire length of the new water boundaries for the new lots.

The survey plan must depict three “esplanade strips” as a non-primary parcel with a parcel type being Esplanade Strip, a unique parcel identifier being “A”, “B” etc. and a Cadastral Survey Dataset type and number to comply with Rules 5.5.1(a), 5.5.2 and 5.5.4 of the Rules for Cadastral Survey 2010. This is also covered in Rules 9.6.3(d) and 10.4.2(d) of the Rules for Cadastral Survey 2010.

The landward boundaries for the three “esplanade strips” must be depicted as irregular boundaries on the survey plan at a width of 10.00 metres except where it coincides with an underlying parcel boundary. This will comply with Rule 6.6(c) of the Rules for Cadastral Survey 2010.

These irregular boundaries are to be shown as irregular lines at a scale that “clearly shows its shape and relationship to other boundaries” as outlined in Rules 3.4(a), 9.6.8 and 10.4.6 of the Rules for Cadastral Survey 2010.

The width of each “esplanade strip” that is depicted in the Cadastral Survey Dataset must be shown on both the diagram of survey and the diagram of parcels as outlined in Rules 9.6.14(a)(iii) and 10.4.9(b) of the Rules for Cadastral Survey 2010.

Sufficient vectors are required in the Cadastral Survey Dataset for each new intersecting point on an irregular boundary to enable the survey relationship between all points and marks to be ascertained in accordance with the relevant accuracy standards. This will comply with Rule 9.6.13(c) of the Rules for Cadastral Survey 2010. These new intersecting points are to be “defined by survey” to comply with Rule 6.2(a)(i) of the Rules for Cadastral Survey 2010 and can be depicted as an unmarked point, as illustrated in table 12 within Rule 12.2 of the Rules for Cadastral Survey 2010.



## Question 10

As mentioned in the brief there is an existing pipeline easement traversing through Lot 1. Provide an Easement Schedule, with annotations, for this pipeline easement relevant to the “accreted” and “eroded” areas. (3 marks)

### Response:

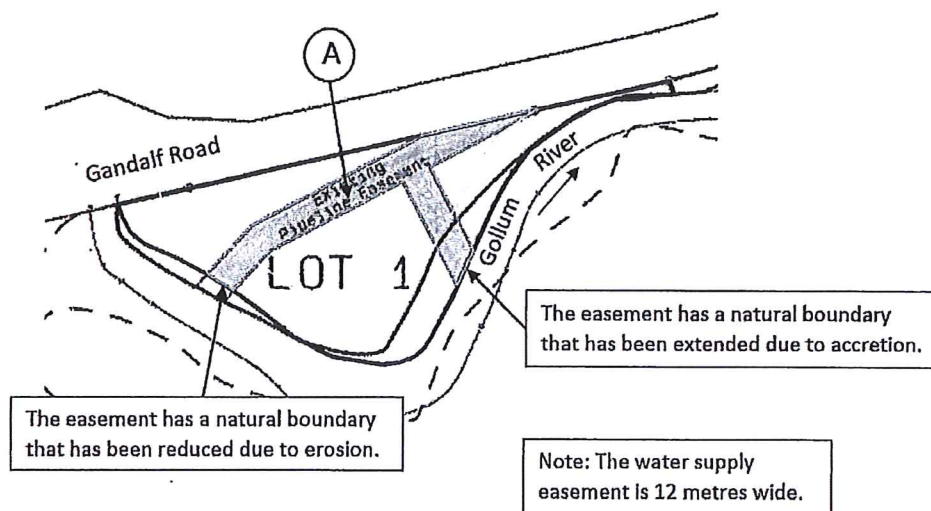
As far as can be ascertained, there is nothing currently written that specifically deals on how to address existing easements where “accretion” and “erosion” has occurred.

In “eroded” areas, any existing easements that was previously surveyed and shown on the parcel being surveyed would disappear. The existing easement would be shown as going up to the new water boundary and no partial surrender of that existing easement would be required. The rationale behind this is that the “erosion” parcel will become part of a hydro parcel which does not have any title reference.

For “accreted” areas this is more difficult. The legal principle is that the “accreted” land takes on the same characteristics and interests as the land held in the existing Computer Freehold Register. The general consensus is that if the “accretion” is minor, then that existing easement can be extended over the “accreted” area. There would therefore be a presumptive right whereby the purpose of the existing easement in the first instance was to run to the river bank, or water boundary. In this scenario the existing easement should therefore be allowed to extend in the same direction to the present river bank, or water boundary.

If however, the area of “accretion” is considered major, then it may be prudent to show and create a new easement over the “accreted” area. This would certainly be required if the layout of the new easement needs to change directions several times.

For the situation shown on the attached plan, the existing easement boundaries would be modified to exclude the “eroded” area and include the “accreted” area (see diagram). New boundary points will be required where the existing easement boundaries meet the present river bank, or water boundary and are to be “defined by survey” to comply with Rule 6.2(a)(i) of the Rules for Cadastral Survey 2010. These new boundary points can be depicted as an unmarked point, as illustrated in Table 12 within Rule 12.2 of the Rules for Cadastral Survey 2010. Sufficient vectors will also be required in the Cadastral Survey Dataset for each new boundary point to enable the survey relationship between all points and marks to be ascertained in accordance with the relevant accuracy standards. This will comply with Rule 9.6.13(c) of the Rules for Cadastral Survey 2010.



If the existing easement has already been captured on land-on-line during a previous survey, then that parcel needs to be extinguished and a new parcel re-captured in the Cadastral Survey Dataset. The survey plan must depict the existing easement as a non-primary parcel with a

parcel type being Area, a unique parcel identifier being “A”, “B” etc. and a Cadastral Survey Dataset type and number to comply with Rules 5.5.1(a), 5.5.2 and 5.5.4 of the Rules for Cadastral Survey 2010. This is also covered in Rules 9.6.3(d) and 10.4.2(d) of the Rules for Cadastral Survey 2010.

The Easement Schedule required to be attached to the Cadastral Survey Dataset needs to comply with Rule 10.2.2(b) of the Rules for Cadastral Survey 2010. An example is as follows:

<b>Schedule of Existing Easement</b>			
<b>Purpose</b>	<b>Shown</b>	<b>Servient Tenement</b>	<b>Created by</b>
Right to convey water	A	Lot 1 hereon	T.194588.1



## APPENDIX

- Figure 1: “Erosion” and “accretion” areas.
- Figure 2: New boundaries where “accretion” not claimed.
- Figure 3: “Esplanade strips” where “accretion” not claimed.
- Figure 4: New boundaries where “accretion” is claimed.
- Figure 5: “Esplanade strips” where “accretion” is claimed.

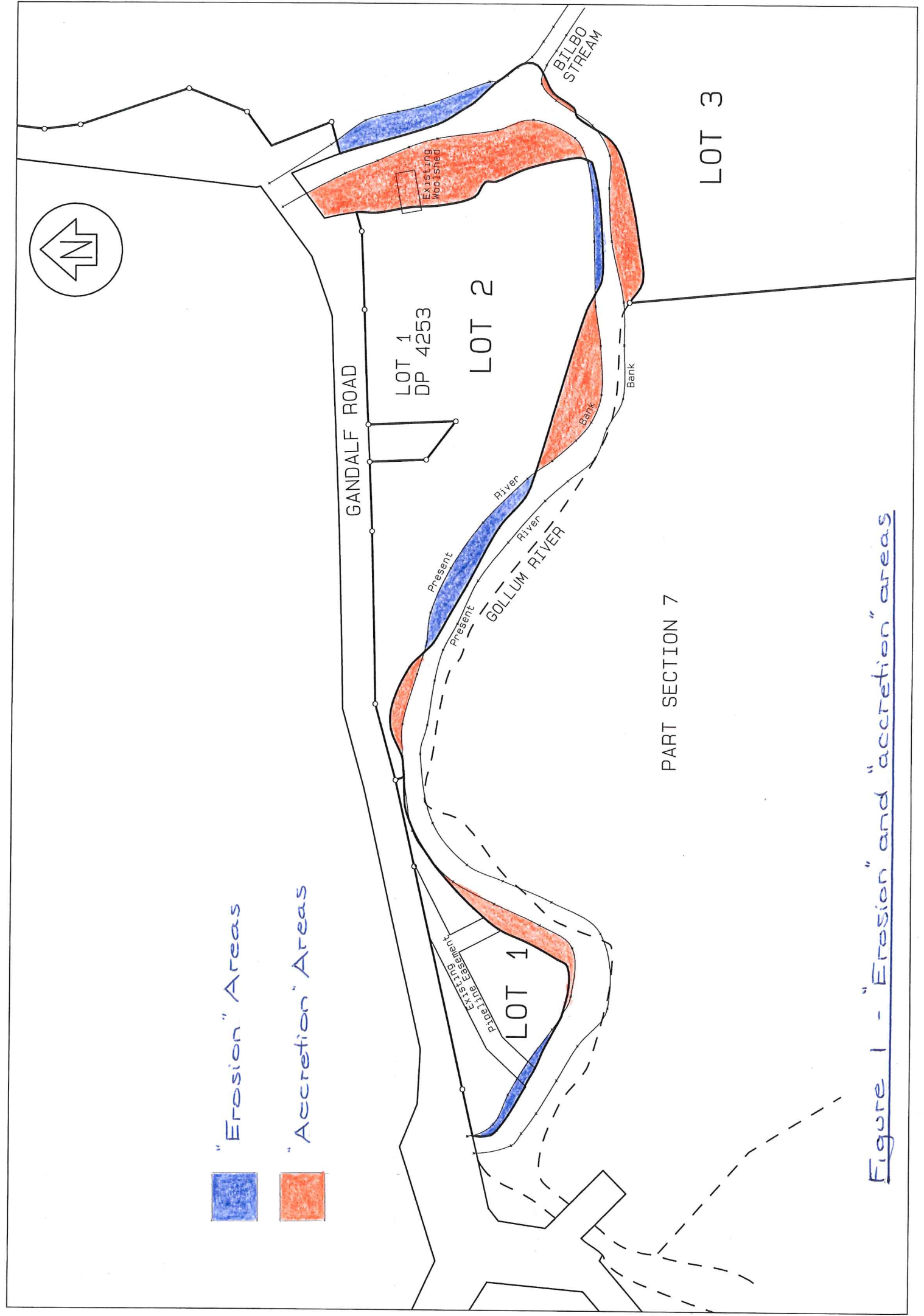


Figure 1 - "Erosion" and "accretion" areas



Residue parcels  
(ie. "erosion")



GANDALF ROAD

LOT 1  
DP 4253

LOT 2

LOT 1

Pipeline Easement  
Existing

Present  
River

GOLLUM RIVER

River

Bank

Bank

PART SECTION 7

LOT 3

BILBO  
STREAM

Figure 2 - New boundaries where "accretion" not claimed.

Residue parcels  
(ie "erosion")

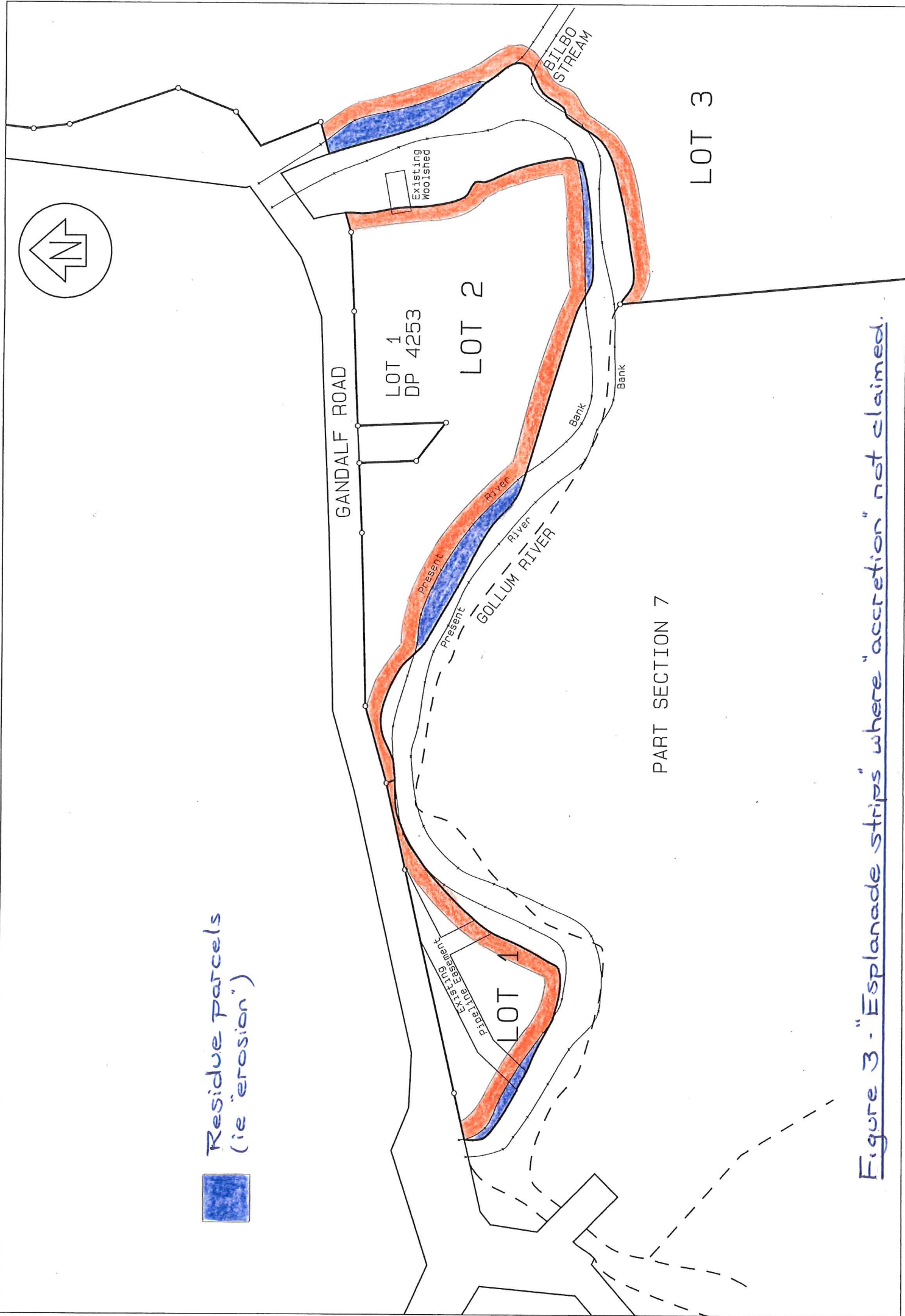



Figure 3 - "Esplanade strips" where "accretion" not claimed.



 Residue parcels  
(ie. "erosion")

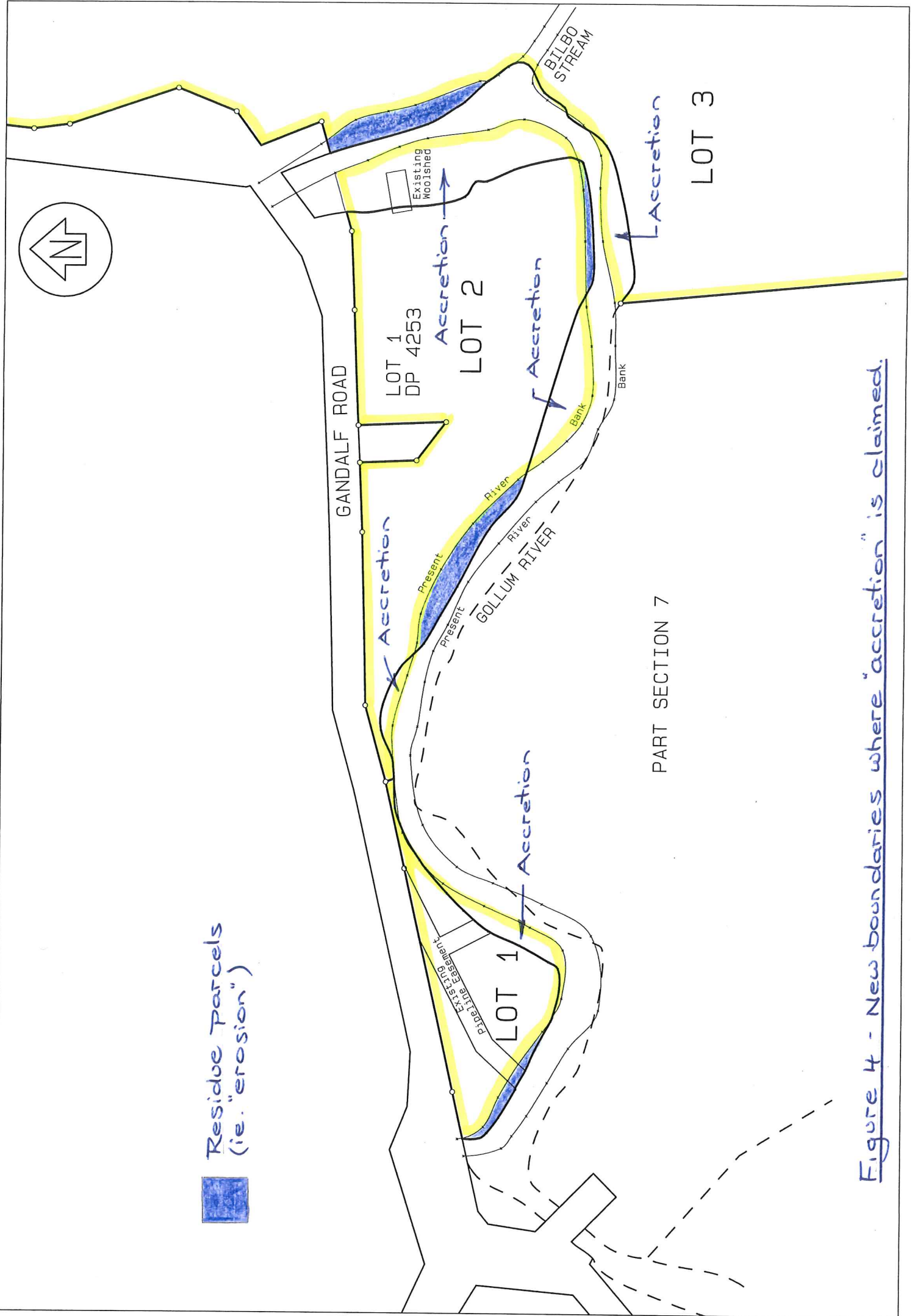


Figure 4 - New boundaries where "accretion" is claimed.

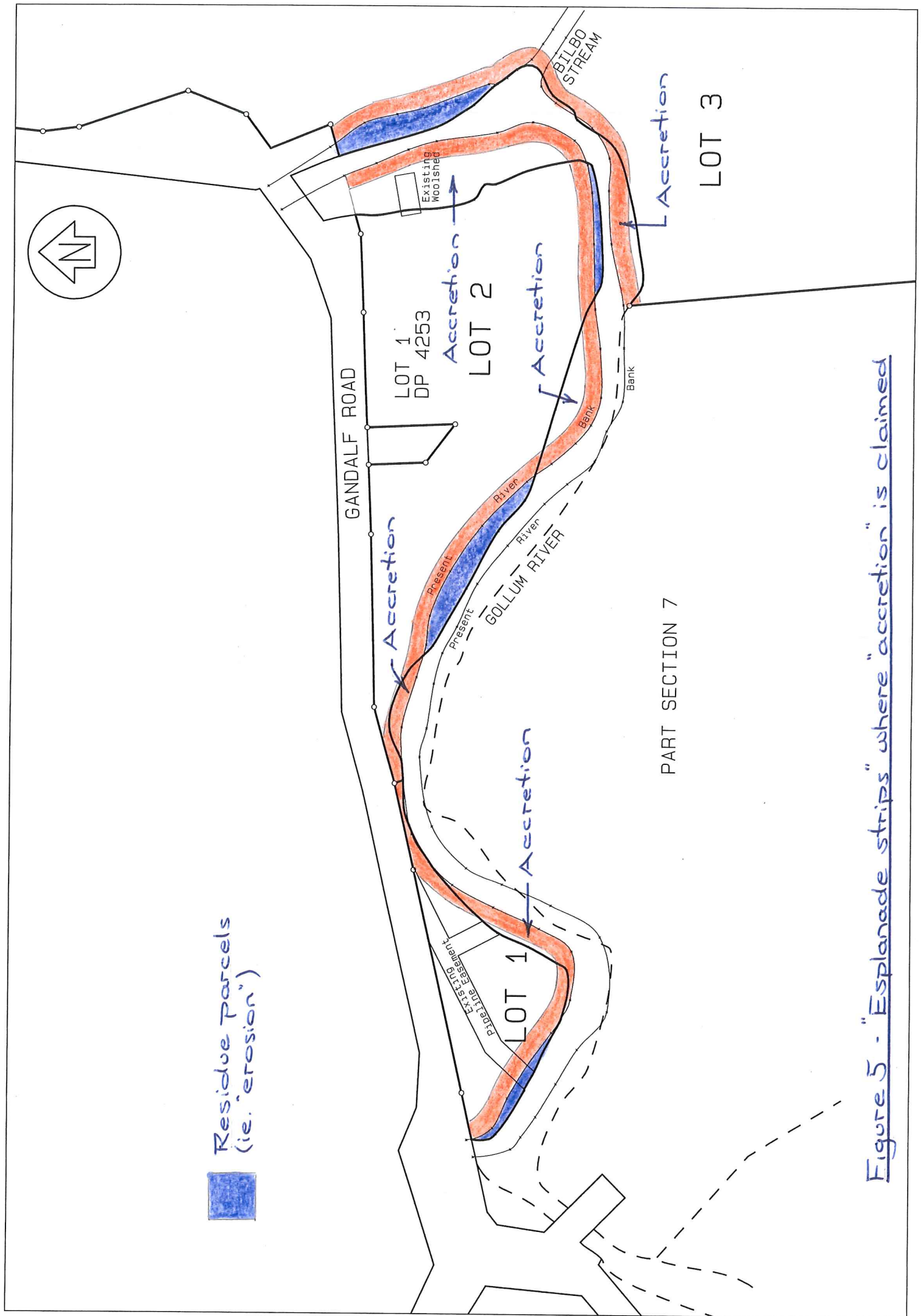


Figure 5 - "Esplanade strips" where "accretion" is claimed