Forest TENURES BRANCH

Industry & BCTS Guide to the Submission of Road Tenure via the Electronic Submission Framework (ESF)

Version 4
11, March 2021

BRITISH COLUMBIA

Ministry of Forests, Lands, Natural Resource Operations and Rural Development

Amendment Log

VERSION	CONTENT AMENDED	AUTHOR/DATE
Version 2	Original	Forsite June 16, 2006
Version 2.1	Pg 1, 3, 4: Clarification of BCTS role Pg 4: Added details re: SUPs for roads Pg 9: Added details re: PoCs and PoTs Pg 20: Clarification of the tenure process for roads that extend beyond the boundary of a cutblock Various formatting and grammatical fixes throughout	Forsite July 25, 2006
Version 2.2	Pg 4: Included roads authorized under CPs Pg 6: Included discussion on multipart geometry including self-intersecting roads Pg 8/9: Included reference to FSR numbers being assigned by Property Services Pg 10/13: Clarification of Management Unit Type and ID fields Appendix A: Management Unit ID List added Various clarification of FSR/Branches and RP/Sections throughout Various formatting and grammatical fixes throughout	Forsite September 5, 2006
Version 2.3	Pg 9: Correct error in describing the FTA file status as PE for an FSR added in FTA prior to an ESF submission. Correct status is PA	Forsite November 28, 2006
Version 2.4	Pg 1: Upate Schema version and FTA version Pg 10,11,13,14,15: Update attribute requirements as per Schema 9 Pg 14,15,20,28: Updates to Amendment start and end stations for decreasing section/branch length Pg 22: Added Section/branch retirement Pg 23: Added special case scenario requiring mulitple permits Pg 26 Added discussion re: Timber Mark assignment	Forsite April 13, 2007

Amendment Log

VERSION	CONTENT AMENDED	AUTHOR/DATE
	Various: Added references to Road Special Use Permits Various formatting and grammatical fixes throughout Correction to Amendment to remove example: Page 14 – Amendment Start and End Station examples Page 20 – Updated XML example	
Version 2.5	Page 7 & 8 – added road tenure conventions section from CP/RP Admin manual Reformatted to match CP/RP Admin manual Various: Reconciliation of agreement holder and licensee terminology Page 11, 16, 20 – Clarification of FSR Branch ID naming conventions (i.e. 3 numeric characters) Added Appendix B: Comparison of Schema 8 and 9	Forsite June 4, 2007
Version 3	Updated for Schema 10 and new RRS schema 1	CGI February 9, 2021

Industry/BCTS Roads Guide Issues

Readers

If you notice any errors, omissions, or have concerns about an interpretation provided in this guide, please send an email to the Information, Innovation and Technology Division (IITD): nrmenquiries@gov.bc.ca

In the subject line, type: **Roads Industry/BCTS Guide Issues**

In the body of the email, include:
- the guide's section number and heading;
- your concern;
- suggestions on how to improve the manual.

About This Manual

Intent

This manual provides guidance on the submission of Road Tenures through the Electronic Submission Framework (ESF) to forest industry staff, and BC Timber Sales Staff. Within the current legislative and systems framework, this guide provides clear direction on the required submission elements for road tenures within the province

Audience

The manual targets Forest Licensee staff, BC Timber Sales Staff, consultants, and service providers working on behalf of any or all of those organizations who are tasked with completing electronic submissions of Road Tenures to Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD), or who are interested in a better understanding of road tenure submissions requirements. FLNRORD staff who are involved in Road Tenures may also find this guide useful.

The manual is also expected to be used as a general reference for staff from other ministry business areas, computer system developers, staff of other provincial agencies, licensees and the general public.

Organization

This manual is divided into three parts:
1. Road Permits, Forest Service Roads, and Road Special Use Permits
2. Types of Road Tenure Applications
3. Administration Appendices

The detailed Table of Contents can be used as an index to find topics of interest.

Where applicable, references are cited with hyperlinks to websites, where available.

Acknowledgements

The Industry and BCTS Guide to the Submission of Road Tenure via the ESF is offered as best available advice from the Ministry's e-submission experts.

Preface

The manual utilizes pre-existing material owned by the Province of BC, such as material posted on government websites.

Contacts

Questions, suggestions for new content, or corrections should be directed to:

> Ministry of Forests, Lands, Natural Resource Operations and Rural Development, Innovation and Technology Division (IITD): nrmenquiries@gov.bc.ca

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Part 1. Forest Roads, Permits & Tenure

This document is intended to provide forest industry staff, BC Timber Sales (BCTS) staff and consultants with a view of Road Tenure and Timber Mark assignment for the purposes of applying for Road Tenure through the Electronic Submission Framework (ESF). The Road Tenure conventions described have been defined by the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD) and accurately reflect the current business processes used by FLNRORD to manage Forest Road Tenure in British Columbia. This document supersedes all references to Road Tenures in the *Forest Industry Guide to the Submission of Forest Tenure and Permit Documents via the Electronic Submission Framework* (ESF) version dated 17 June 2005 or earlier.

This document is specific to the submission requirements for Road Tenures using the Resource Road System (RRS) Schema 1.

Forest Roads

Under the *Forest Act*, all forest roads constructed on crown land must be tenured.

Industry and BCTS Licensees are required by legislation to obtain tenure from FLNRORD for industrial roads on crown land.

FLNRORD and BCTS hold the obligation on some roads not tenured by industry and must register tenure on those roads as *Forest Service Roads* (FSR).

Road Tenure submissions must be made for all Road Permits, Forest Service Roads, and Road Special Use Permits through the Electronic Submission Framework.

What is a Road Tenure?

In British Columbia, any timber transported on Crown Land to a public road must be on tenured forest road. A *Road Tenure* is an agreement between FLNRORD and a third party that authorizes the tenure holder to occupy land and (in some cases) remove timber for the purpose of constructing a road to access timber on crown land. A Road Tenure does not track events or activity on a road. For the business of forestry in British Columbia, transportation of timber on crown land to a public road must be on tenured forest roads. Road Tenures must be contiguous from the timber source location to the junction with a Forest Service Road, another Road Tenure, or a public road. Transportation of timber across private land must be done in agreement with the landowner and remains the responsibility of the agreement holder. The **Figure 1** depicts a typical scenario of a contiguous road tenure.

A *Road Tenure* should cover a logical, geographic-based road system unless part of the road is a FSR or part of the road is under a different agreement holder's road permit. For example: a valley that is going to be developed for timber production is a logical geographic unit that could be covered by a single Road Tenure.
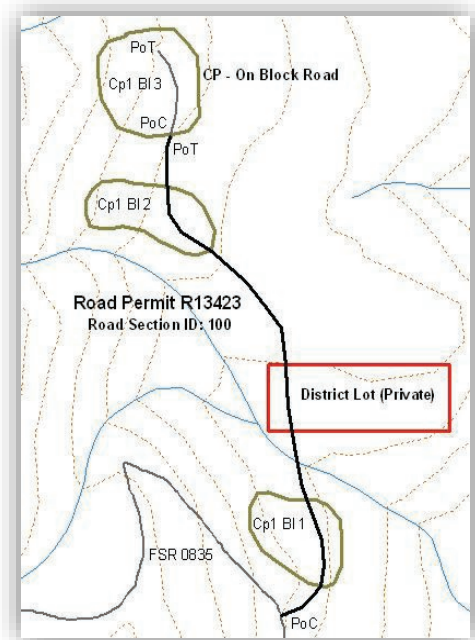

Figure 1: Contiguous Road Tenure

For more information on Road Tenures see the *Cutting Permit and Road Tenure Administration Manual* which can be found on the following website: https://www2.gov.bc.ca/gov/content/industry/forestry/forest-tenures .

Note: *The Cutting Permit and Road Tenure Administration Manual has been recently updated to address evolving ministry business processes.*
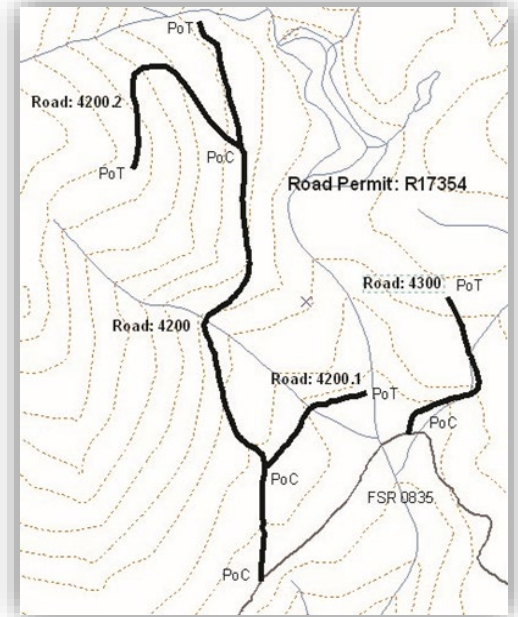
Figure 2: Geographic based Road Tenure

Types of Road Tenures

For industry and BCTS (on behalf of their licensees) there are three types of Road Tenures that can be applied for:

- Road Permit (RP) – Ministry file type B01
- Road Use Permit (RUP) – RUP's are not supported by ESF. Applications will be made in the NROS portal when they become available
- Road Special Use Permit (rSUP) – Ministry file type S01(Forest) & S02 (Non Forest)

For Ministry and BCTS (in some situations) there are two types of Road Tenures:

- Forest Service Road (FSR) – Ministry file type B40
- Road Special Use Permit (rSUP) – Ministry file type S01 (Forest)

Each type of Road Tenure can have one or more unique road sections (File Type B01, S01 & S02), or branches (File Type B40).

The process for applying for tenure through electronic submission is basically the same for RPs, FSRs, and rSUPs.

Road Permits

A *Road Permit* (RP) provides the holder of an agreement the right to occupy the land, construct a road, the obligation to maintain the road, and may also include the right to harvest timber if the crown owned timber must be harvested in order to construct the road (*Forest Act Part 8*).

If there are multiple road sections in the tenure area these would be tenured under one road permit with multiple road sections.

The permit would also describe how Timber Marks are to be assigned to timber harvested from the Tenure.

Business Rule: One Road Permit can contain one or many road sections.

Road Use Permit

A *Road Use Permit* (RUP) provides the holder of the agreement the right to use a FSR as per the terms and conditions of the agreement (*Forest Act Part 8*). Presently RUPs can not be applied for through the ESF. Applications for RUP will be made available via the NROS portal in 2021. Until then, contact your FLNRORD District Office if you require a RUP or an amendment to an existing RUP.

Forest Service Road

Roads managed by the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (Ops and BCTS) are tenured as Forest Service Roads (FSRs). Non-ministry industrial users of FSRs require authorization through an RUP.

Road Special Use Permit

Road SUP's fall into two categories:
- Forest (S01)
- Non- Forest (S02)

A Forest Use rSUP provides authority for roads used for developing natural resources related to timber development activity. A rSUP gives the holder the authority to occupy the land and build a road related to timber development activity, but does not provide for harvesting authority. A secondary harvesting authority is required if crown owned timber needs to be removed along the rSUP road right of way. Access roads to logging camps or quarries would generally fall under this type of permit.

A Non Forest use rSUP provides the authority for roads that are to be used for developing natural resources other than timber. A secondary harvesting authority is also required if crown owned timber needs to be removed along the rSUP road right of way. Roads on crown land to access an oil or gas claim is an example of a Non Forestry rSUP.

Cutting Permit Road (On Block)

A Cutting Permit (CP) authorizes construction of roads as per the terms and conditions of the agreement. Roads authorized under a CP must be wholly contained in the CP area and are included within the polygons that make up the CP in the ESF/FTA submission (i.e. road(s) authorized under a CP are not submitted as lines, they are included within the area identified by the CP polygons).

Road Tenure Conventions

A single **road tenure** should cover a full, logical, geographic-based road system unless part of the road is FSR or under a different agreement holder's RP. The example, **Figure 3: One Road Tenure**, on the right shows a single road section - regardless of the associated timber harvesting agreement or management unit. In this example, the private land segments (described below) would not be cleared or authorized along this road section. The Exhibit "A" map that would accompany the authorization to build this road would only authorize the segments on the Crown Land.

The permit would also describe which timber mark to use for each land base. If there were branches in the Crown land portion of the example road, the branches would also be under the same road tenure with different section identifiers.

A **road section** describes a continuous road from a junction with public road or other road tenure. The distance from the point of commencement (PoC) to point of termination (PoT) does not break for administrative or ownership boundaries. A road section is made up of at least one road segment.

If the road section was extended 10 km beyond the existing PoT, the PoT of the road section would then become 110 km using the original PoC and the same road section identifier.

A **road branch** becomes a new road section with its own PoC at the intersection with the other road section. The example does not have any branches but if a road amendment added a 15 km branch from 55 km, a new **section** would be needed with a PoC at the intersection and a PoT at 15 km on the new branch. This new road section would have a unique road section identifier.

A **road segment** is the portion of a road section described as distances from the road section's PoC. The way a road section is broken into segments has to do with land status and timber marks.

Figure 4 illustrates that Road Section 50 of Road Tenure R01664 is made up of six Road Segments: 0-20 (yellow), 20-40 (black), 40-50 (purple), 50-60 (green), 60-80 (black) and 80-100 (blue). Appropriate timber marks would have to be assigned to all segments on Crown Land in order to ensure the wood is associated with the correct land base. Road Segments 50-60 and 80-100 would share the same timber mark but are different Road Segments because segment 60-80 is on private land and road segments must be contiguous but not overlapping.
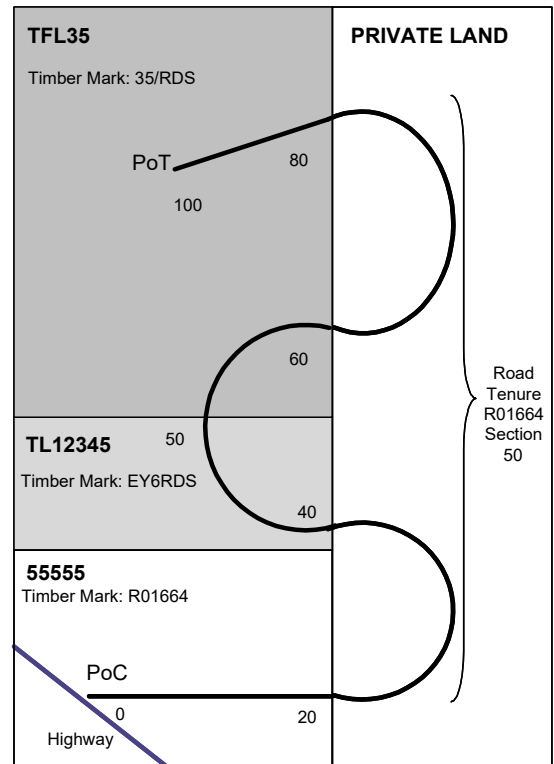
Figure 3: One Road Tenure for a Road
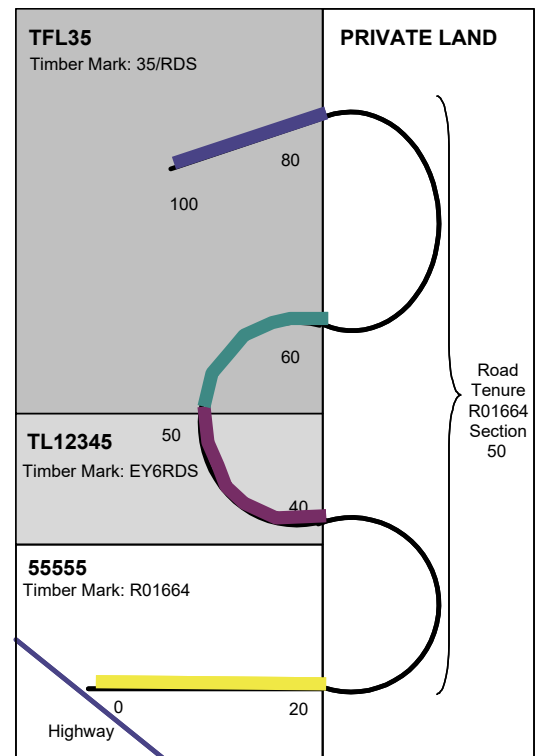
Figure 4: Road Segments

<u>Road Components</u>

Tenure Road Sections and Branches

A tenured road section/branch describes a continuous road from the point of commencement (PoC) (usually a junction with a public road or other Road Tenure) to the point of termination (PoT) (usually the end of the road or a junction with another public road or other Road Tenure). A tenured road section/branch can be made up of one or more unique road segments (see *Road Segments* below).

Figure 5 is an example of a single tenure road section/branch that has a PoC at an intersection with a public road (e.g. a highway, another tenured road section/branch, or some other tenure holders road), and a PoT at the end of the road. A single FSR branch would be an equivalent.

> ***Business Rule:*** *One road section defines one road.*

Road Segments

A road segment is a portion of a tenured road section described as from and to measures relative to the section's point of commencement (PoC).

Figure 5: Single Tenured Road Section/Branch

Some Forest Road Management Systems (such as LRM: Land Resource Management) may store a single tenured road section/branch as a collection of multiple segments (as seen in the left hand diagram below).

The FLNRORD RRS system only maps roads to the section level (as seen in the figure 7 below).
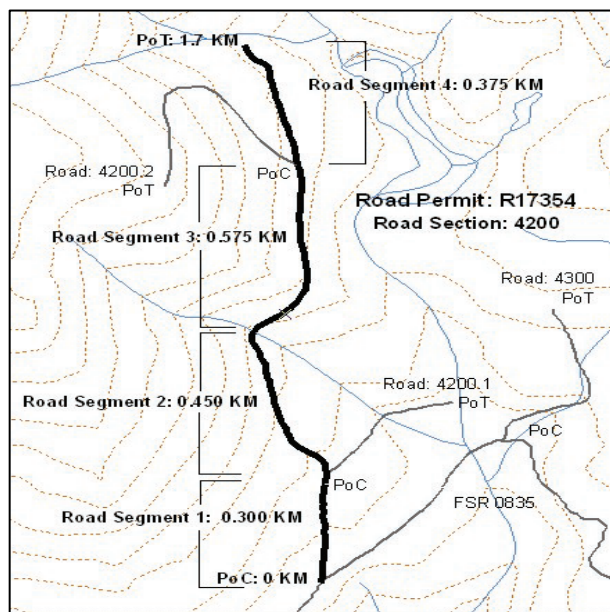
Figure 6: Industry/BCTS FRMS
Four Segments of Road Section 4200

Figure 7: MoFLNRORD
Single segment of Road Section 4200

For ESF submissions, it is preferable that the start station or PoC establishes "proper" directionality for the road section (i.e. PoC at town end of road PoT at woods end).

Also, for ESF submissions of most road sections/branches, potential agreement holders have two options for submitting spatial representations of road sections (see 1, and 2 below); however, in the case of self-intersecting roads (e.g. clover leaf roads, or loop roads) there is only one option (see 2 below).
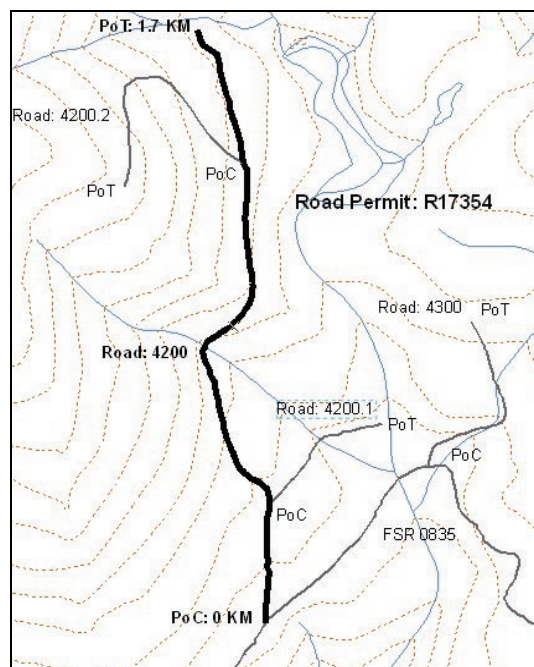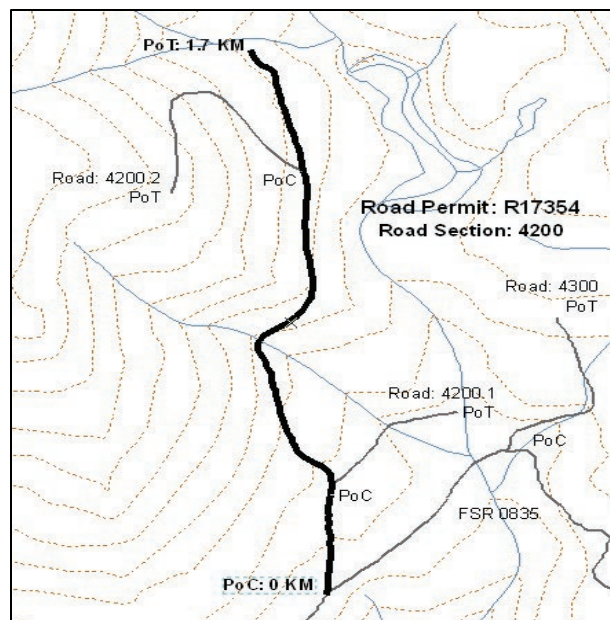
1. It is preferred by FLNRORD that each non-intersecting road section/branch submitted through the ESF be represented spatially as a single unbroken segment (as seen in **Figure 7**). To meet this preference, potential agreement holders managing road sections/branches as multiple segments in their FRMS must consolidate all segments that make up a road section/branch to a single contiguous (unbroken) line before submitting through the ESF.

2. The second option for most roads and the only option for self-intersecting roads (e.g. cloverleaf roads or loop roads) is to spatially represent each road section/branch using multipart geometry. Multipart line geometry allows a submitter to represent a single line (such as a road section or branch) as a series of smaller contiguous lines in which the PoT of the first line is equal to the PoC of the second line, and the PoT of the second line is equal to the PoC of the third line, etc., until the end of the road. This series of segments must be ordered, and contiguous.

Note: *Individual line segments making up a multipart line string cannot intersect and individual lines making up the string cannot intersect themselves. The PoC and PoT of a segment can touch. It is for this reason that multipart line geometry is the only way to represent and submit self-intersecting roads through the ESF (see Figures 8, 9 and 10 below).*

While the geometry may be multipart, it will represent a single road section/branch. The attribute data that will accompany the geometry in the submission document will be for a single road section/branch.

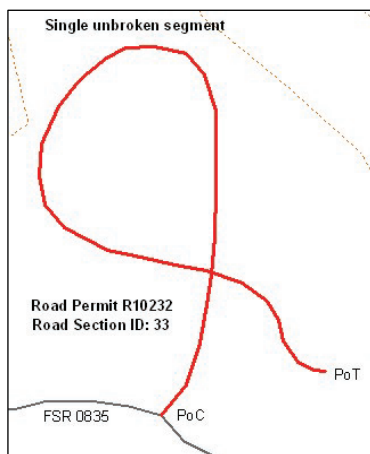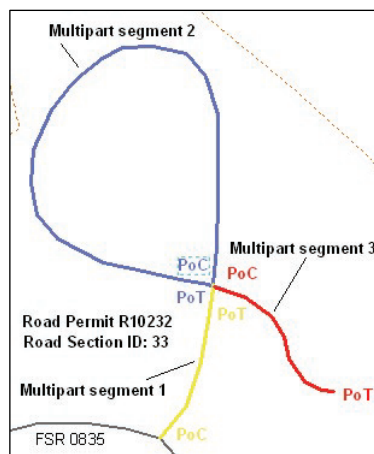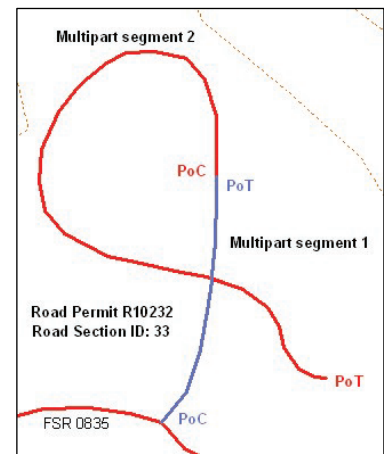| Figure 8: Single Segment | Figure 9: Multipart Segments | Figure 10: Overlapping Segments |

Examples of a single road section/branch: segmented and unsegmented:

- **Figure 8** cannot be submitted as a single segment since it intersects itself.
- **Figure 9** can be submitted as none of the segments actually cross themselves or any other segment.
- **Figure 10** cannot be submitted since segment 2 crosses over segment 1.

Road Naming Conventions

Under the Electronic Submission Framework (ESF), the potential agreement holder will submit the Road Section/Branch Identifiers for each tenured road section/branch. For Road Permits and Road Special Use Permits these identifiers can be up to 30 characters in length, and they can be made up of a combination of alpha and numeric characters. For Forest Service Roads, these identifiers can be up to three characters in length, and be made up of numeric characters only.

For tenured road sections/branches that are currently in RRS, agreement holders must use the section/branch identifier of the section/branch as it appears in RRS for any future amendments to that road section/branch.

For road sections that do not currently exist in RRS (i.e. new sections/branches), potential agreement holders have the opportunity to identify the road as they see fit. For example, if a potential agreement holder expects to refer to a road as the 4200 Road, they could use that as the section identifier for that road section (assuming that there isn't already a road section in RRS with that name under the same road permit). ESF will not allow a submitter to submit a "new" road section under a Road Permit that already contains a road section with the same section identifier.

Potential agreement holders are encouraged to identify the road section/branch with a name or identifier that they wish the Ministry to reference the road section/branch. Usually this name will be logical and have business significance to the agreement holder.

Potential agreement holders are discouraged from using redundant terms to identify a road section/branch. For example, terms like; Section, Sec, Branch, or Br are redundant and should be avoided unless there is a significant business case that warrants such terms.

> **Note 1:** For road tenure submissions, there is a "Road Section Identifier" field and a "Road Name" field. The "Road Section Identifier" is the primary and mandatory naming mechanism. The "Road Name" is optional and allows an agreement holder to provide a secondary identifier for a given road section/branch.

> **Note 2:** The XML file format contains reserved characters that contain special meaning within the XML syntax. Use of these characters in attribute descriptions will cause the XML/GML submission to fail.

XML Reserved Characters

CHARACTER	DESCRIPTION
<	less than
>	greater than
&	ampersand
'	single quote or apostrophe
"	double quote
/	forward slash
%	percent

Part 2: Types of Road Tenure Applications

In the following sections Road Permits, Forest Service Roads, and Road Special Use Permits will collectively be referred to as road tenures. It is reasonable to assume that any specification mentioned applies equally to each tenure type unless otherwise specified.

Under the Electronic Submission Framework, there are three broad categories of submissions:

- New Road Tenures
- Amendments of existing Road Tenures
- Retirements of existing Road Sections/Branches

New Road Tenure

A new Road Tenure may be applied for when a potential agreement holder is looking to develop road(s) in a geographically unique area. The new Road Tenure will be made of at least one Road Tenure Section/Branch, but it can be made up of many Road Tenure Sections/Branches.

For example, a new Road Tenure could consist of a road, R14200, and three spur roads; 4200-1, 4200-2 and 4200-3, each of which would be a unique Road Tenure Section or Branch.

Note: The road identifier R14200 and section identifiers 4200-1, 4200-2 and 4200-3 are used as examples of typical, logical road naming sequences in the submitter's business system (submitted as mandatory "Road Section Identifier" in an ESF submission). Roads may also have local names defined (submitted as optional "Road Name" in an ESF submission).

Submitting a new FSR in RRS, the steps required before submitting to ESF have changed:

1. In RRS the 'Add New" process will automatically generate the FSR Project ID. In the past, this came from Property Services.
2. When the FSR is issued within RRS, the issuer must include the FLAG email address as the Receivers of the permit in order to inform Property Services of the new Project and Project ID

Once the new FSR ID is generated in RRS, BCTS or Natural Resources Operations can submit complete attribute and spatial data to RRS via ESF in the same manner as an industry licensee would for a RP or rSUP.

A New or Amended Road Tenure will have mandatory and optional data requirements for both Attribute (textual) and Spatial (mapping) data. For a New Road Tenure the Attribute requirements are defined in Table 1 and New Road Section/Branch Attribute requirements are defined in Table 2. For an Amended Road Tenure the Attribute requirements for are defined in Table 3 and for an Amended Road Section/Branch the Attribute requirements are defined in Table 4.

Attribute Requirements

Note: With the release of RRS 1.0 the PoC/PoT definitions for each Road Tenure Section/Branch will be auto-generated based on the spatial data contained in the submission document. The PoC/PoT description will/must be noted on the Exhibit A Maps generated by RRS and will be expressed as UTM coordinates to facilitate ground location.

Table 1: New Road Tenure Attribute Details

FIELD	REQUIRED	DETAILS
Forest File ID Number	No RPs: B01 rSUPs: S01,S02	The Forest File ID for a new road permit and a road special use permit is assigned by the Ministry of Forests, Lands, Natural Resource Operations and Rural Development when the submission document is sent through ESF. *So, do not put in field?*
	Yes FSRs: B40	For FSRs, the Forest File ID is the number given by Property Services for the new FSR. (See note above), and must be included in the submission document.
File Type	Yes	This code identifies the type of permit. Licensee use: • B01 - Road Permit and • S01, S02 – Road Special Use Permit BCTS use: • B01 - Road Permit • B40 – FSR, and • S01, S02 – Road Special Use Permit FLNRORD use: • B40 – FSR and • S01, S02 – Road Special Use Permit
Application Description	Yes	Written description of the reason for the application or amendment. **Note:** XML reserved characters cannot be used. See note above.
District Code	Yes	Enter the three-letter code for each district. See https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/ministry-of-forests-lands-and-natural-resource-operations-region-district-contacts for complete list of codes.

FIELD	REQUIRED	DETAILS

Management Unit Type	Yes	Code to indicate the type of Management Unit the Road Tenure is within. Use **T** if applicable to the tenure, use **U** for all other tenures.
		 Valid Codes:
		    U - TSA
		    T – TFL and Timber Licences (inside of TFL)
		    F – Woodlot
		    C – Community Forest
		    Z – Timber Licence (outside of TFL)

Management Unit ID	Yes	TSA number or file number to identify the **Management Unit Type:** Tree Farm Licenses (T) it is the TFL number (e.g. for TFL 35 it is 35). Timber Supply Areas (U) it the TSA area (e.g. for the Kamloops TSA it is 11). See Appendix A for a list.
Application Purpose	Yes	"**N**" to indicate a **N** (ew) Road Tenure.
BCTS Office	Conditional	Required if the submission is BCTS funded. Valid Entry - BCTS Org Unit Code

Table 2: New Road Section/Branch Attribute Details

FIELD	REQUIRED	DETAILS
Road Section ID	Yes	This field represents the Road Section ID for RPs/rSUPs and represents the Branch ID for FSRs. For RPs and rSUPs it is a 30 character alphanumeric string. For FSRs it is a 3 character numeric string. Enter the numbers and/or letters to identify the road section/branch. Usually this name will be logical and have business significance to the agreement holder. FSRs it is the FSR project number followed by the branch number (i.e. 12345.03). **Note:** XML reserved characters cannot be used. See note above.
Road Name	Optional	An alternate or local road name. The road name is **NOT** the road section/branch identifier found in RRS. **Note:** XML reserved characters cannot be used. See note above.
Application Purpose	Yes	Enter "**N**" to indicate a new Road Section/Branch. Valid entries are **N**(ew), **A**(mendment), and **R**(etire).

FIELD	REQUIRED	DETAILS
Tenure Width	Conditional	Required for rSUP only. This specifies the tenure width (in meters) of the rSUP. This is the total width of tenure (half of this width will lay on each side of the centre line). The minimum road rSUP width is 20m and the maximum is 75m. **Note:** If Road width is provided in a RP and FSR, it will not be used. Tenure width for RPs and FSRs defaults to the regulation width of 75m.
Amendment Start Station	No	N/A
Amendment End Station	No	N/A
Amendment Type	No	Required for all Road Section amendments (i.e. application purpose = **A**). This field must not be included in new submissions (i.e. section application purpose = **N**), or in retirement submissions (i.e. section application purpose = **R**).

Spatial Data Requirements

The spatial data that is required for a new Road Tenure includes the centerline of all Sections/Branches being applied for from PoC to PoT. Each Section/Branch in the submission must be defined spatially as one single contiguous section.
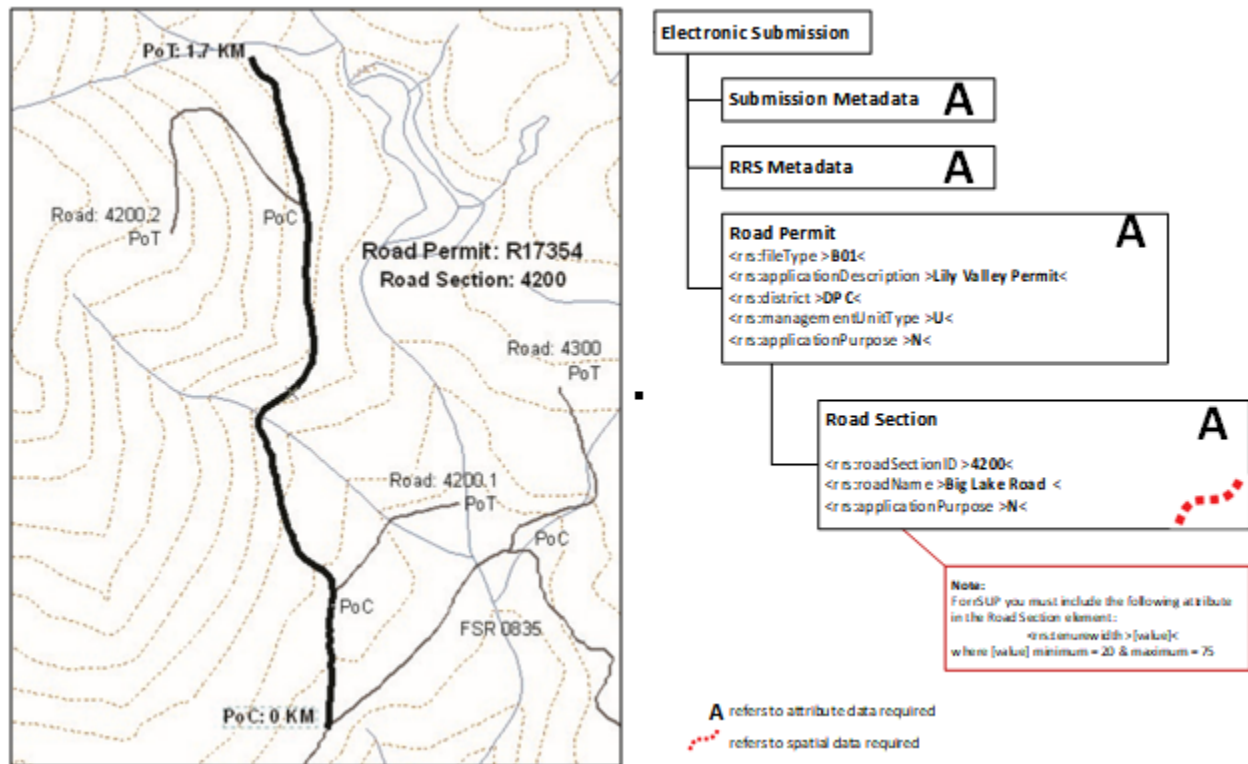

Figure 11 & 12 : New Road Section 4200 with XML Submission

Note: In the case of FSRs, the diagrams above would be modified by replacing the terms 'Road Permit' and 'Road Section' with 'FSR' and 'Branch' respectively, changing the file type to B40, and changing the 'Road Section ID' to the 'Branch ID'.

Amended Road Tenure

The next broad category for Road Tenure Submissions are *Amendment Submissions*. An Amendment Submission is used to modify a Road Tenure in some manner. There are three reasons why a road permit would need an amendment, because:

1. a new Section/Branch is being added to an existing Road Tenure,
2. an existing Road Tenure Section/Branch is being amended (e.g. shortening or lengthening), or
3. an existing Road Tenure Section/Branch is being reengineered (e.g. re-alignment).

Attribute Requirements

Table 3: Amended Road Tenure Attribute Details

FIELD	REQUIRED	DETAILS

Forest File ID Number	Yes	The Forest File ID or Road Tenure number assigned by the Ministry Forests and Range to the existing tenure.
		Example:
		    Road Permit – R12345
		    FSR – 12345
		    rSUP – S12345

File Type	No	Not required for a Road Tenure Amendment.
Application Description	Yes	Written description of the reason for the application or amendment. **Note:** XML reserved characters cannot be used. See note above.
District Code	Yes	Enter the three letter code for each district. See https://www2.gov.bc.ca/gov/content/industry/forestry/managing-our-forest-resources/ministry-of-forests-lands-and-natural-resource-operations-region-district-contacts for complete list of codes.

Management Unit Type	Required	Code to indicate the type of management unit the road tenure is within. Use **T** if applicable to the tenure, use **U** for all other tenures.
		Valid Codes:
		    U - TSA
		    T – TFL and Timber Licences (inside of TFL)
		    F – Woodlot
		    C – Community Forest
		    Z – Timber Licence (outside of TFL)

FIELD	REQUIRED	DETAILS
Management Unit ID	Required	TSA number or file number to identify the **Management Unit Type:** Tree Farm Licenses (T) it is the TFL number (e.g. for TFL 35 it is 35). Timber Supply Areas (U) it the TSA area (e.g. for the Kamloops TSA it is 11). See Appendix A for a list.
Application Purpose	Yes	"**A**" to indicate an amended Road Tenure
BCTS Office	Conditional	Required if the submission is BCTS funded. Valid Entry - BCTS Org unit Code

Table 4: Amended Road Section/Branch Attribute Details

FIELD	REQUIRED	DETAILS
Road Section ID	Yes	This field represents the Road Section ID for RPs/rSUPs and the Branch ID for FSRs. For RPs and rSUPs, it is a 30 character alphanumeric string. For FSRs, it is a three character numeric string. Enter the numbers and/or letters to identify the road section/branch. Usually this name will be logical and have business significance to the agreement holder. FSRs it is the FSR project number followed by the branch number (i.e. 12345.03). **Note:** XML reserved characters cannot be used. See note above.
Road Name	Optional	An alternate or local road name. The road name is **NOT** the road section identifier found in RRS. **Note:** XML reserved characters cannot be used. See note above.
Application Purpose	Yes	Valid entries are **N, A, R**. Enter "**N**" to indicate a new Road Section/Branch or; Enter "**A**" if it is an amendment to a Road Section/Branch already covered by the RP/FSR/rSUP. Enter "**R**" if it is an application to retire a Road Section/Branch already covered by the RP/FSR/rSUP. **Note:** An existing road that is being added to the Road Tenure would be a **N**ew Road Section/Branch whereas a change in the geometry of a existing Road Section/Branch already covered by the Road Tenure would be an **A**mendment. A road on which the agreement holder no longer has obligations may be **R**etired.

FIELD	REQUIRED	DETAILS
Tenure Width	Conditional	Required for rSUP only.
		This specifies the tenure width (in metres) of the rSUP. This is the total width of tenure (half of this width will lay on each side of the centre line). The minimum road rSUP width is 20m and the maximum is 75m.
		This field is not required for rSUP retirements (i.e. application purpose = R).
		Note: If road width is provided in RP and FSR amendments it will not be used. Tenure Width for RPs and FSRs defaults to the regulation width of 75m.
Amendment Start Station	Conditional	Required for all amendments (i.e. **Section** Application Purpose = **A**). This field should not be included in new submissions (i.e. **Section** Application Purpose = **N**), or in retirement submissions (i.e. **Section** Application Purpose = **R**).
		The road station where the amendment starts (**in kms**) of the road section/branch being amended.
		Examples:
		Amendment to Lengthen - where Road Section R-100 is 2km long, and is being amended to add 1km to the end of existing R-100, the Amendment Start Station is "2".
		Amendment to Shorten - where Road Section R-200 is 6km long, and is being amended to shorten the road by 2km from the end of existing R-200, the Amendment Start Station is "0".
Amendment End Station	Conditional	Required for all amendments (i.e. **Section** Application purpose = **A**). This field must not be included in new submissions (i.e. **Section** application purpose = **N**), or in retirement submissions (i.e. **Section** application purpose = **R**).
		The road station where the amendment ends (in kms), of the road section being amended.
		Examples
		Amendment to Lengthen - where Road Section R-100 is 2km long, and is being amended to add 1km to the end of existing R-100, the Amendment End Station is "3".
		Amendment to Shorten - where Road Section R-200 is 6km long, and is being amended to shorten the road by 2km from the end of existing R-200, the Amendment End Station is "4".

FIELD	REQUIRED	DETAILS
Amendment Type	Conditional	Required for all Road **Section** Amendments (i.e. **Section** application purpose = **A**). This field must not be included in new submissions (i.e. **Section** application purpose = **N**), or in retirement submissions (i.e. **Section** application purpose = **R**).
		NOTE: **The following codes have changed** with the new RRS schema:
		REENG – amendment to change the road layout due to re-alignment of the original road planned (was REN)
		SHORTENING – amendment to shorten the length of the road to be built vs what was previously submitted for that section (was RMV)
		INCREASE – amendment to lengthen the road to be built vs what was previously submitted for that section (was ADD)

Spatial Data Requirements

The spatial data that is required for amended road tenures will depend on the type of amendment being submitted. The following describes each of the four amendment scenarios supported by ESF.

Add New Road Section/Branch

Where a new road section/branch is being added to the road tenure the only spatial that is required is the centerline of the new road section/branch from PoC to PoT. If more than one new road section/branch is being included in the submission, then the centerline for each road section/branch need to be included in the submission.
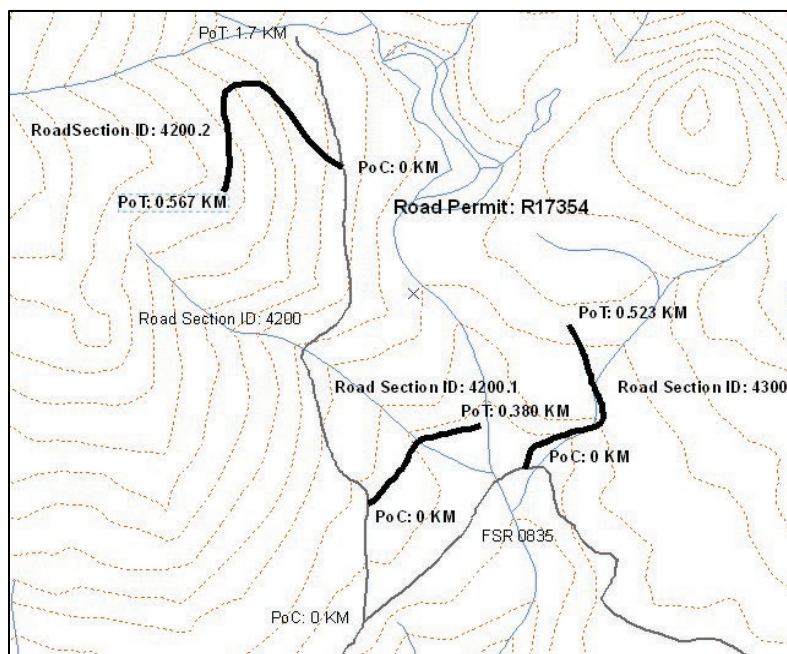
Figure 12: Addition of 3 New Road Sections to permit R17354

Note: In the case of FSRs the diagram above and below this paragraph will be modified by replacing the terms Road Permit and Road Section with FSR and Road Branch respectively, changing the file type to B40, and changing the Road Section ID to the Road Branch ID.

Figure 13: New Road Section XML Submission

Amendments of Road Section/Branch

Extend Length

Where an existing tenured road section/branch is being extended or lengthened, the spatial centerline for the entire tenured road section/branch is required from the original or new PoC through to the original or new PoT.
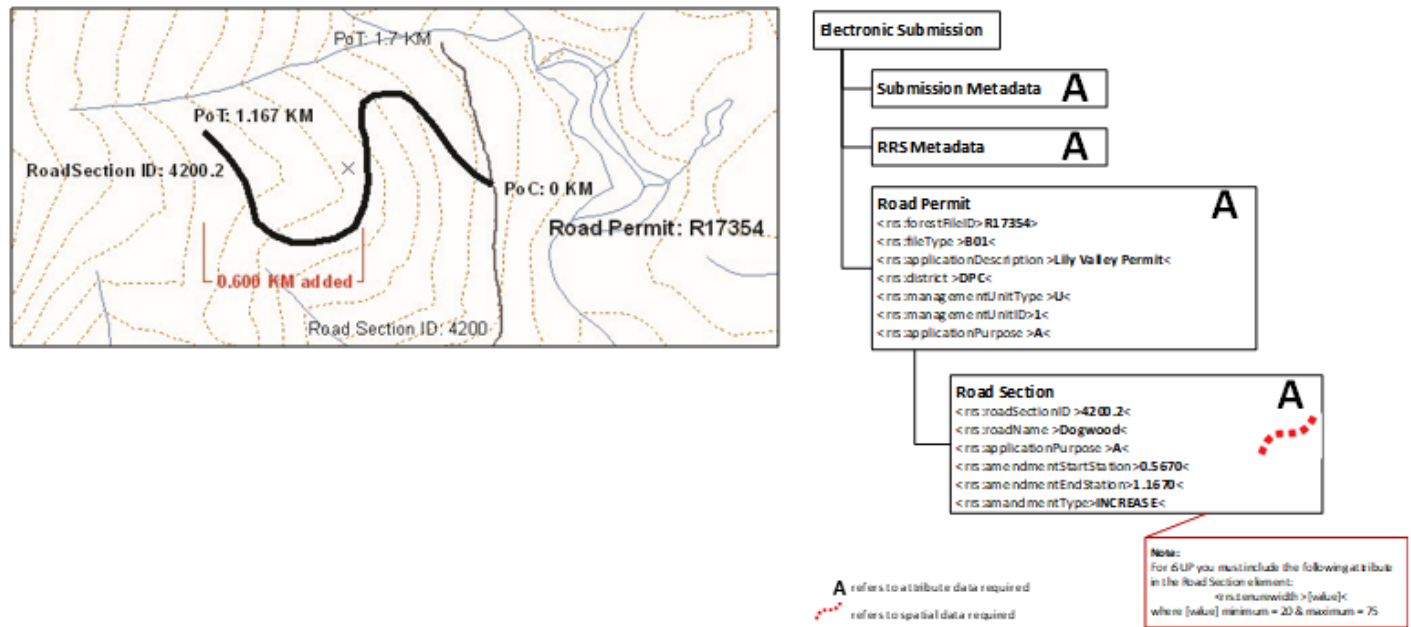
Figure 15 & 16 : Road Section 4200.2 extended 600M from 0.567KM to 1.167KM with XML Submission

Note: In the case of FSRs the diagrams above will be modified by replacing the terms road permit and road section with FSR and branch respectively, changing the file type to B40, and changing the Road Section ID to the Branch ID.

Decrease Length

Where an existing road section/branch is being reduced or shortened, the spatial centerline for the road section/branch is required from the original PoC through to the new PoT at the relocated road endpoint.
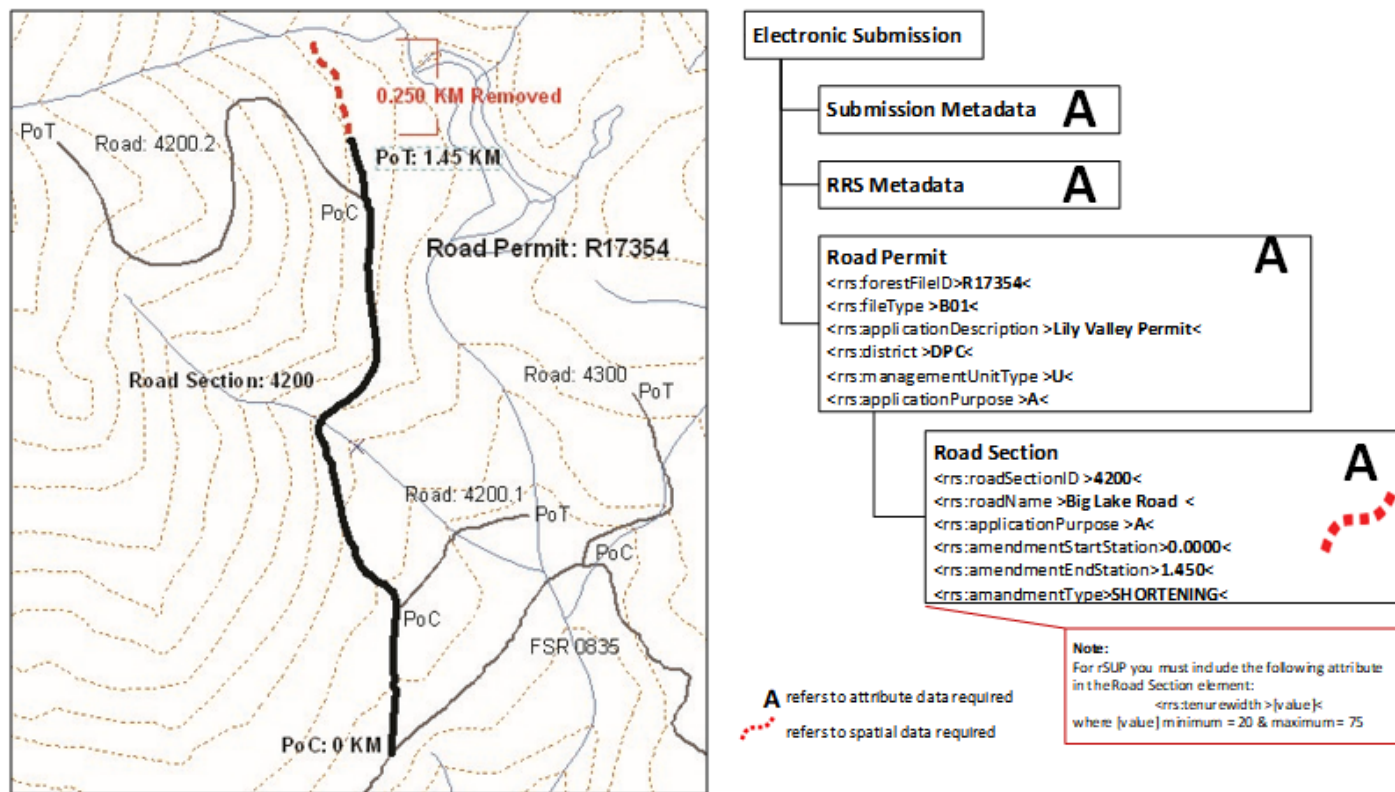
Figure 14 & 18: Road Section 4200 decreased in length by 0.250 KM with XML Submission

Note: In the case of FSRs the diagrams above and below will be modified by replacing the terms road permit and road section with FSR and branch respectively, changing the file type to B40, and changing the Road Section ID to the Branch ID.

Re-engineered Road

Where the location of an existing road is being modified or re-aligned the spatial centerline for the entire road section/branch is required from the PoC to the PoT. Either of the PoC or PoT may be the original or new depending on the modifications required by the agreement holder.
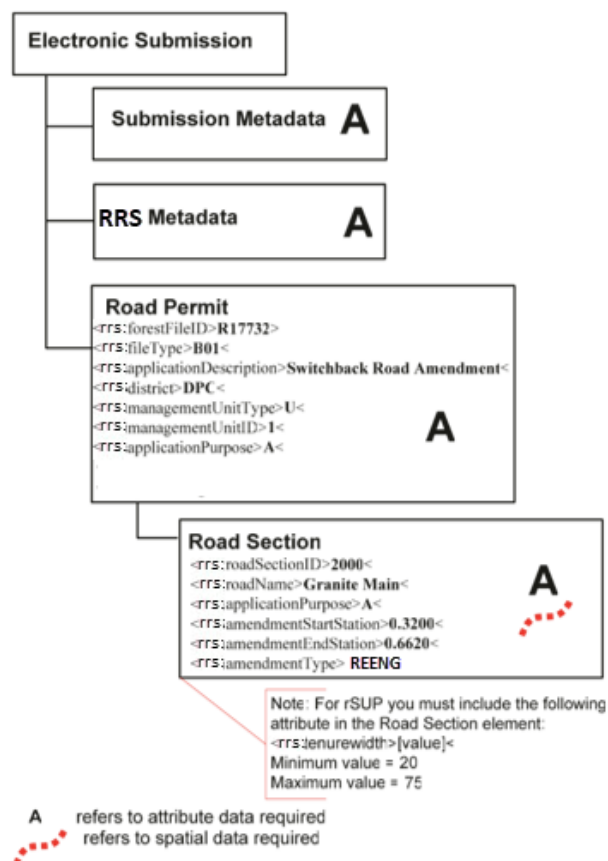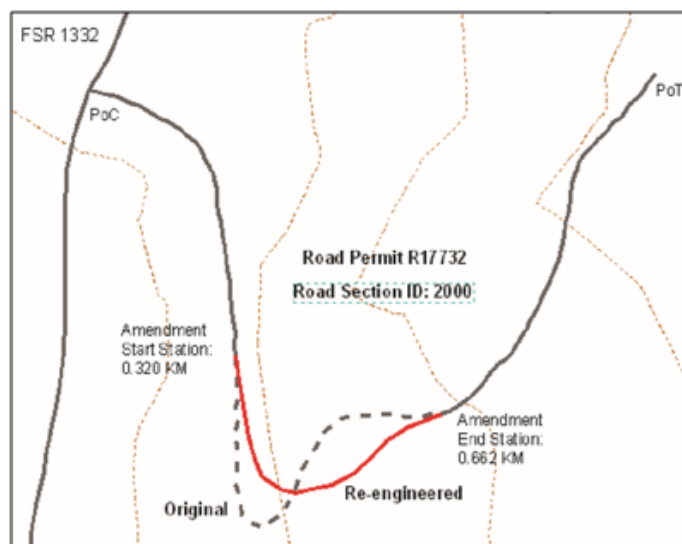
Figure 19 & 20: Road Section 2000 Realigned mid section and XML Submission

Note: In the case of FSRs the diagrams above will be modified by replacing the terms road permit and road section with FSR and Branch respectively, changing the file type to B40, and changing the Road Section ID to Branch ID.

Road Section/Branch Retirements

Road Section/Branch retirements are now supported by the ESF. Road Section/Branch retirements are actually amendments to existing Road Tenures. That is to say, it is a submission to amend an existing road tenure by retiring one or more road sections/branches. Agreement holders can apply to retire an individual road section/branch or multiple road sections/branches from a road tenure. Note that road tenures will not be retired. It is possible that an agreement holder may apply to retire all sections/branches of a particular tenure; however, each road will be retired on a section-by-section basis. It is expected that different licensees and different districts will approach retirements differently. In some cases, the section/branch retirement submission will start the legal proceedings to remove the obligation from the licensee, while in other cases the retirement submission will be the last step in the process. Generally, agreement holders should arrange with the appropriate district prior to proposing to retire a road section.

Road section retirement applications will also be available via the NROS portal. These forms will allow licensees to apply for the retirement of parts of road sections rather than only retiring the entire road section. The application forms will be available in NROS later in 2021.

Attribute Requirements

The attribute requirements for a road section/branch retirement are described in the following tables.

Table 5: Retired Road Tenure Attribute Details

FIELD	REQUIRED	DETAILS
Forest File ID Number	Yes	The Forest File ID or Road Tenure number assigned by the Ministry Forests and Range to the existing tenure. **Example:** Road Permit – R12345 FSR – 12345 rSUP – S12345
File Type	No	Not required for a Road Tenure Retirements.
Application Description	Yes	Written description of the reason for the application or amendment. **Note:** XML reserved characters cannot be used. See note above.
District Code	Yes	Enter the 3-letter code for each district. See http://www.for.gov.bc.ca/his/ft/techspec/ for complete list of codes.
Management Unit Type	Mandatory	Code to indicate the type of management unit the road tenure is within. Use **T** if applicable to the tenure, use **U** for all other tenures. **Valid Codes:** **U** - TSA **T** – TFL and Timber Licences (inside of TFL) **F** – Woodlot **C** – Community Forest **Z –** Timber Licence (outside of TFL)
Management unit ID	Mandatory	TSA number or file number to identify the **Management Unit Type:** Tree Farm Licenses (T) it is the TFL number (e.g. for TFL 35 it is 35). Timber Supply Areas (U) it the TSA area (e.g. for the Kamloops TSA it is 11). See Appendix A for a list.
Application Purpose	Yes	"**A**" to indicate an amended Road Tenure
BCTS Office	Conditional	Required if the submission is BCTS funded. Valid Entry - BCTS Org unit Code

Table 6: Retired Road Section/Branch Attribute Details

FIELD	REQUIRED	DETAILS
Road Section ID	Yes	This field represents the Road Section ID for Road Permits/road Special Use Permits and this field represents the Branch ID for FSRs. For RPs and rSUPs, it is a 30 character alphanumeric string. For FSRs, it is a 3 character numeric string. Enter the numbers and/or letters to identify the road section/branch. Usually this name will be logical and have business significance to the agreement holder. FSRs it is the FSR project number followed by the branch number (i.e. 12345.03). **Note:** XML reserved characters cannot be used. See <u>note</u> above.
Road Name	Optional	An alternate or local road name. The road name is **NOT** the road section identifier found in RRS. **Note:** XML reserved characters cannot be used. See <u>note</u> above.
Application Purpose	Yes	Valid entries are **N, A, R**. Enter **"R"** if it is an application to retire a section/branch already covered by the road permit/FSR/rSUP. A road on which the agreement holder no longer has obligations may be **R**etired.
Tenure Width	No	This field is not required for rSUP retirements (i.e. application purpose = R). **Note:** If Road width is provided in RP and FSR amendments it will not be used. Tenure width for FSRs and RPs defaults to the regulation width of 75m.
Amendment Start Station	No	This field should not be included in retirement submissions (i.e. **Section** Application Purpose = **R**).
Amendment End Station	No	This field should not be included in retirement submissions (i.e. **Section** application purpose = **R**).

FIELD	REQUIRED	DETAILS
Amendment Type	No	Required for all Road **Section** Amendments (i.e. **Section** application purpose = **A**). This field should not be included in new submissions (i.e. **Section** application purpose = **N**), or in retirement submissions (i.e. **Section** application purpose = **R**). NOTE: The following codes have changed with the new RRS schema: **REENG** – amendment to change the road layout due to re-alignment of the original road planned (was REN) **SHORTENING** – amendment to shorten the length of the road to be built vs what was previously submitted for that section (was RMV) **INCREASE** – amendment to lengthen the road to be built vs what was previously submitted for that section (was ADD)

Spatial Data Requirements

There is no spatial data required in the XML/GML document for a road section/branch retirement submission. A conceptualized view of the XML document is provided here.

Electronic Submission

Submission Metadata **A**

RRS Metadata **A**

Road Permit **A**
<rrs:forestFileID>R17354>
<rrs:fileType >B01<
<rrs:applicationDescription >Lily Valley Retirement<
<rrs:district >DKA<
<rrs:applicationPurpose >A<

Road Section **A**
<rrs:roadSectionID >4200.2<
<rrs:roadName >Dogwood<
<rrs:applicationPurpose >R<
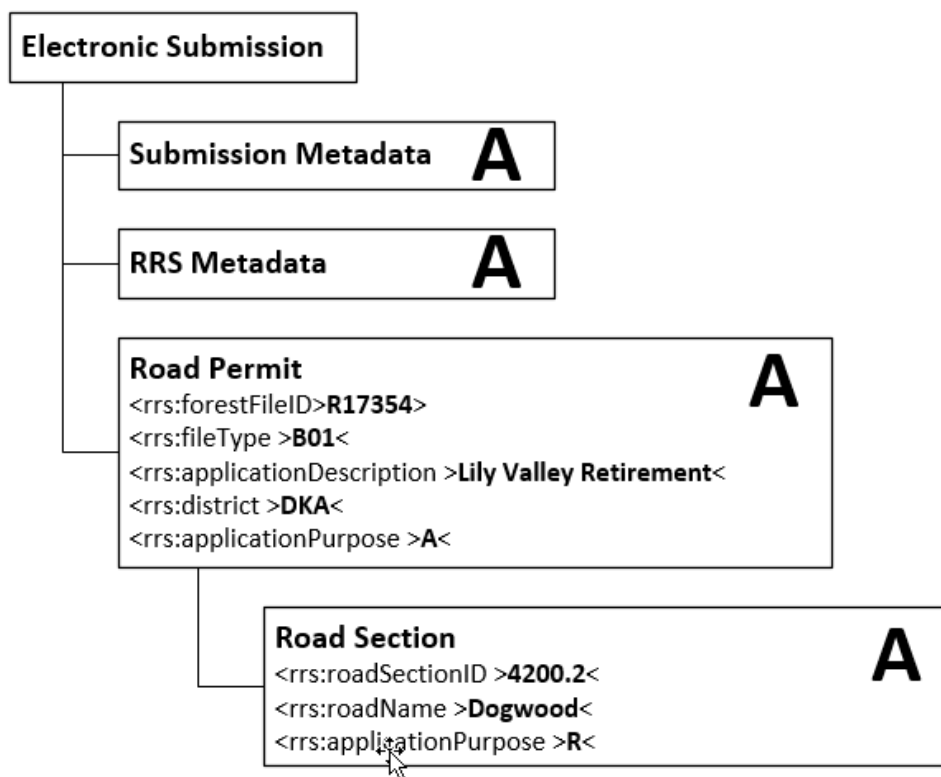
A refers to attribute data required

refers to spatial data required

Figure 15: Road Retirement XML Submission

Note: A retirement will retire the entire section. Applications for retirement of partial sections will be available from within the NROS portal later in 2021.

The following sections deal with unique situations in which additional information, or processes must be followed in order to process the new/amended tenure submission.

New Permit with multiple contiguous Road Sections/Branches

Ministry business rules for road sectioning require that a road be represented as a single section/branch. The situation may arise where the potential agreement holder intends to submit a road tenure with multiple contiguous sections.

From the submitter's perspective, this is valid as it allows the future development of each section as per their long-term operational plans.
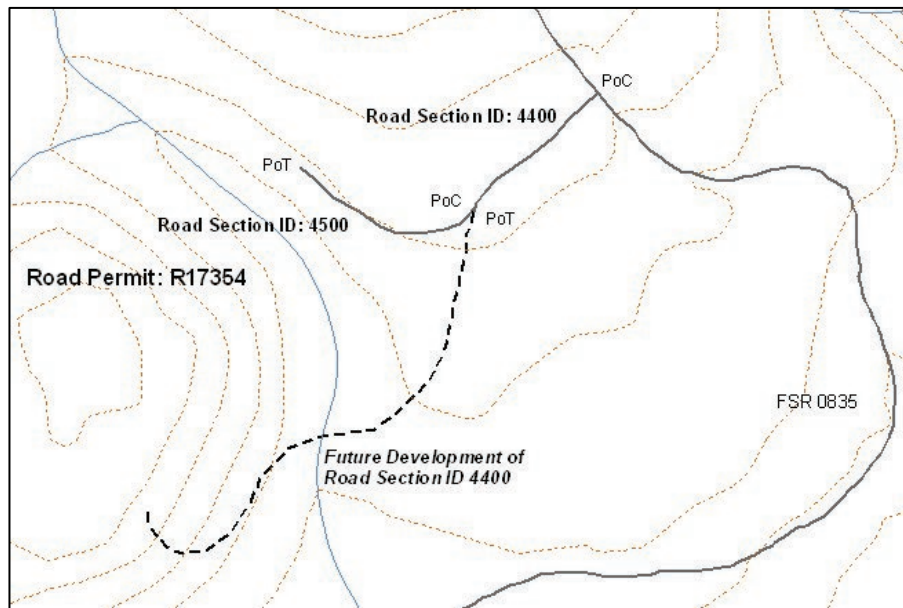
Figure 16: Multiple Contiguous Road Permits to accommodate Section 4200

At first glance, this submission (for sections 4400 and 4500) violates the ministry's business rule for the definition of a road section (see above). The district staff approving the tenure may not readily know the intention of the submitter (i.e. the future extension of the 4400 section to access future timber) and as a result, the tenure may be rejected. It is recommended that the potential agreement holder engage in dialog with the district regarding multiple contiguous sections prior to the submission through ESF to assure that ministry understands the intention and has the opportunity to comment. It is up to the district to decide the acceptability of these special cases.

On block Roads extending beyond the block boundary

In a situation where an on-block road needs to go outside the cutblock (e.g. to facilitate a switchback loop), an application to amend either the road tenure or the cutting permit is required. The issue should only arise because the cutting authority area was not designed properly or unforeseen circumstances prevented the planned on-block road location. The CP holder would have to apply for either a CP amendment to ensure the road is wholly contained within the cutting authority area, or the road tenure holder would have to apply for an road tenure amendment to ensure the entire road section would be tenured under the road tenure up to the point where the road enters the last cutblock for the final time.

A tenured road passing through multiple blocks must be a contiguous road tenure section/branch from the start of the road to the boundary of the last block.

Roads that provide access to future wood must be tenured under road permit.
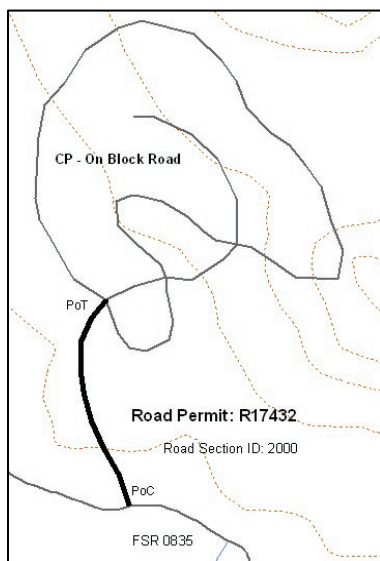
Figure 17: Road Permit Cutting Permit Tenure Split
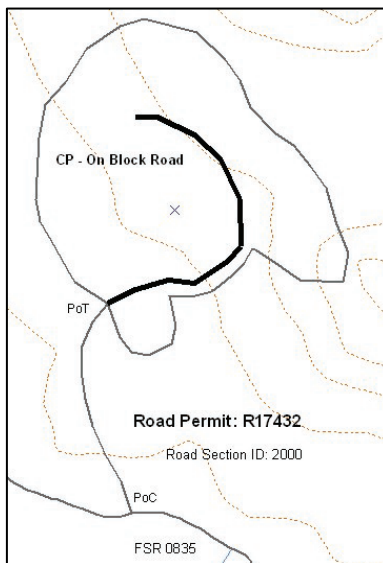
Figure 18: The Cut Block is amended to include Road within the Cut Block
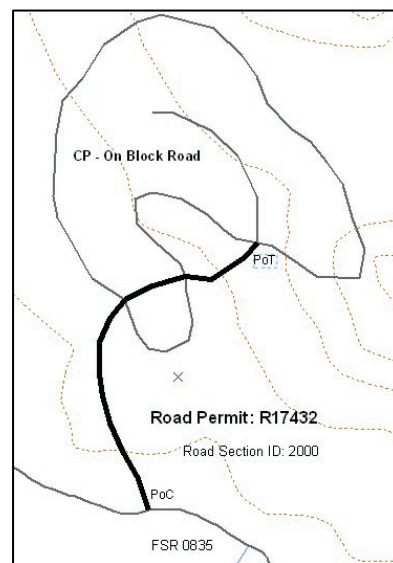
Figure 19: Road Permit Amended to the last Cut Block entry point

Private Land

Authorization for the Road Tenure on private land is not a function of the ministry's Road Tenure process. The process outlined in the *Forest Act (section 120)* is designed to address the portion of a road on private land. Acquiring authorization for a road on private land must be obtained through the landowner and is the responsibility of the agreement holder.

From a submission perspective, the submitter must spatially submit the entire road in the tenure application including the portions that pass through private land. FLNRORD will only authorize tenure on the crown portion of the Road Section, not the private portion. This 'crown tenure' will allow the agreement holder to construct and/or maintain the road on crown land only. As noted above obtaining authorization for construction, use and maintenance of the road on private must be obtained through the landowner land is the responsibility of the agreement holder.
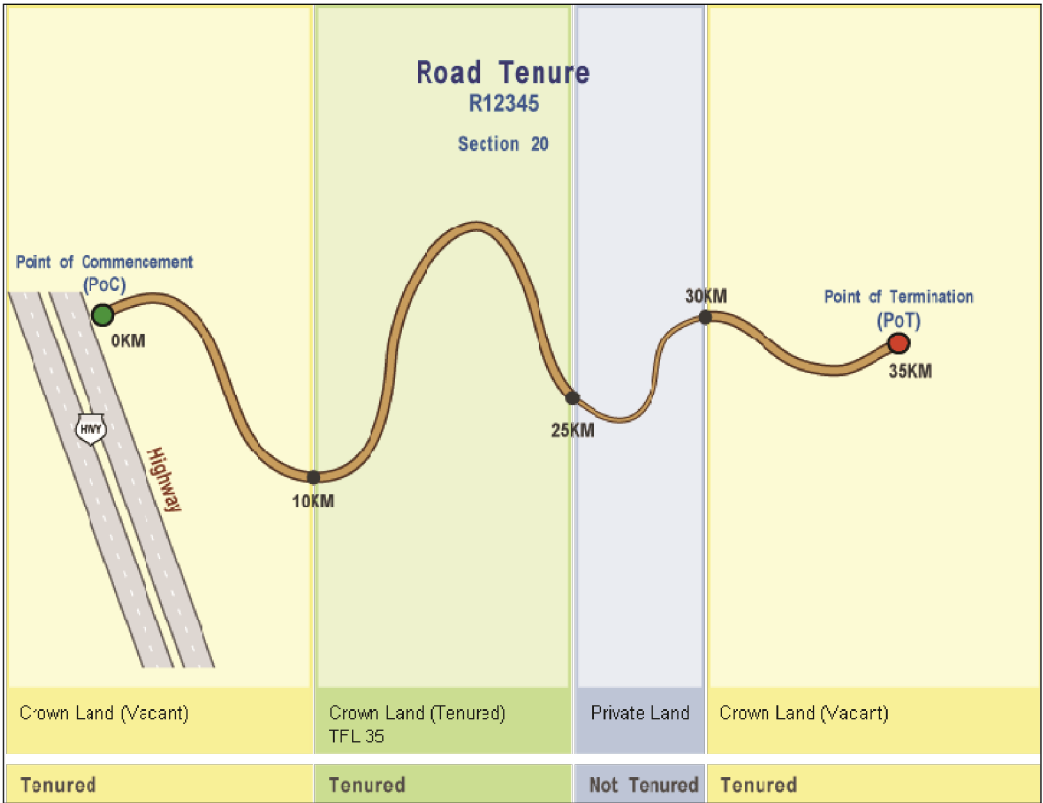
Figure 20: Tenured portions of a Road Permit section on Crown Land

Additional Requirements

Special Use Permits do not give the holders authority to harvest timber. A Special Use Permit only grants authority to occupy the land and build the road. In cases where the removal of timber is required to build the rSUP road or occupy the SUP area the holder of the SUP must also apply for a tenure that will allow them to remove the timber. In cases where timber harvesting is required on the area or right of way identified in the (r) SUP there will be a requirement to apply for additional tenures to authorize the timber harvesting.

Example: An agreement holder needs to construct a road to a gravel pit or other resource (non-timber). In this scenario, the road leading to the gravel pit cannot be approved under a RP or FSR because it does not meet the definition of forest use, industrial road. In order to correctly tenure this situation to allow for the occupation of the land, the construction of the road and the harvesting of timber, the agreement holder would require one rSUP for the road leading to the gravel pit, one SUP for the gravel pit itself, and since the SUP's only grant authority to occupy the land and build the road, the agreement holder must also apply for a tenure that will allow timber harvesting such as a B06 – Occupant License to Cut.

Table 7: Special Tenure requirements when using Special Use Permits

RSS SUBMISSION TYPE	TENURE TYPE	FLNRORD FILE TYPE	PURPOSE CODE	GEOMETRY	DESCRIPTION
Road Application	Road Special Use Permit	S01, S02	Road, Right of Way	Linear feature	Tenure which allows for holder to occupy the land and construct the road (not remove the timber)
Harvest Application	Special Use Permit	S01, S02	Gravel Pit, Rock Quarry	Polygon Feature	Tenure which allows holder to occupy the land and construct the gravel pit (not remove the timber)
Harvest Application	Occupant Licence to Cut	B06		Polygon Feature	Tenure that allows the occupant to cut and remove timber
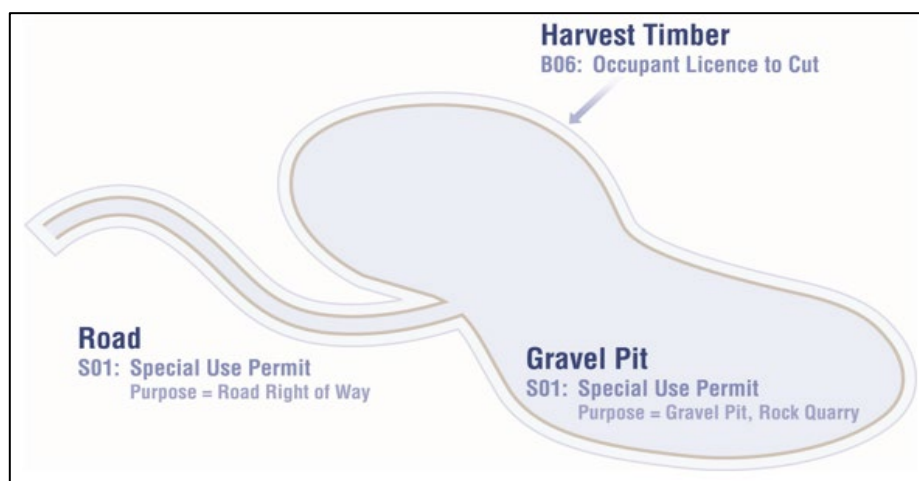
Figure 21: Three tenures required to construct and access a gravel pit

ESF Submission

The example submission document views accompanying the graphic descriptions of Road Tenure submission types in this document have been structured to provide a high-level representation of the XML document components in tree structure and the key attributes in an XML style pseudocode.

Complete technical specifications for Road Tenure submissions can be found at
https://gww.for.gov.bc.ca/his/fta/WebHelp/index.htm

The updated schemas are available here: https://www.for.gov.bc.ca/schema/

The XML document structure is not constrained by Road Tenure, road section or the purpose of the application. Road Tenure XML submission documents can contain submissions for multiple Road Tenures with multiple road sections within each tenure.

The following example submission document view illustrates an ESF submission for a single amendment to a Road Tenure that includes:

- Addition of a new section – Road Section ID: 4300
- Extension of an existing section – Road Section ID: 4200.2
- Shortening of an existing section – Road Section ID: 4200
- Re-engineering of an existing section – Road Section ID: 4200.1

Note: An ESF Submission XML document for a FSR is identical to a RP, which is identical to an rSUP. The terminology used in the XML format will not change. The diagram below illustrates a road permit. A FSR submission can be visualized by replacing the terms road permit, road section and road section ID with FSR, Branch and Branch ID respectively and changing the file type to B40. Further example submissions can be found in the appendices.

Electronic Submission

> **Submission Metadata** **A**

> **RRS Metadata** **A**

> **Road Permit**
> <rrs:forestFileID>R17354>
> <rrs:fileType >B01<
> <rrs:applicationDescription >Lily Valley Permit<
> <rrs:district >DPC<
> <rrs:managementUnitType >U<
> <rrs:managementUnitID>1<
> <rrs:applicationPurpose >A<
> <rrs:higherLevelPlanReference >Canfor FSJ 2004-2010 <
> <rrs:LicenceRegulationCode >F<

>> **Road Section** **A**
>> <rrs:roadSectionID >4400<
>> <rrs:roadName >Nugget Rd<
>> <rrs:applicationPurpose >N<

Note:
For rSUP you must include the following attribute in the Road Section element:
<rrs:tenurewidth >[value]<
where [value] minimum = 20 & maximum = 75

>> **Road Section** **A**
>> <rrs:roadSectionID >4200.2<
>> <rrs:roadName >Dogwood<
>> <rrs:applicationPurpose >A<
>> <rrs:amendmentStartStation>1.1670<
>> <rrs:amendmentEndStation>2.2200<
>> <rrs:amandmentType>INCREASE<

Note:
For rSUP you must include the following attribute in the Road Section element:
<rrs:tenurewidth >[value]<
where [value] minimum = 20 & maximum = 75

>> **Road Section** **A**
>> <rrs:roadSectionID >4200<
>> <rrs:roadName >Big Lake Road<
>> <rrs:applicationPurpose >A<
>> <rrs:amendmentStartStation>0.0000<
>> <rrs:amendmentEndStation>1.000<
>> <rrs:amandmentType>SHORTENING<

Note:
For rSUP you must include the following attribute in the Road Section element:
<rrs:tenurewidth >[value]<
where [value] minimum = 20 & maximum = 75

>> **Road Section**
>> <rrs:roadSectionID >4200.1<
>> <rrs:roadName >Trillium<
>> <rrs:applicationPurpose >A<
>> <rrs:amendmentStartStation>0.1000<
>> <rrs:amendmentEndStation>0.3000<
>> <rrs:amandmentType>REENG<

Note:
For rSUP you must include the following attribute in the Road Section element:
<rrs:tenurewidth >[value]<
where [value] minimum = 20 & maximum = 75

A refers to attribute data required

refers to spatial data required

Appendices

Appendix A: Code Tables

MANAGEMENT UNIT		
TYPE	**ID**	**NAME**
U - TIMBER SUPPLY AREA	1	Arrow TSA
U - TIMBER SUPPLY AREA	2	Boundary TSA
U - TIMBER SUPPLY AREA	3	Bulkley TSA
U - TIMBER SUPPLY AREA	4	Cassiar TSA
U - TIMBER SUPPLY AREA	5	Cranbrook TSA
U - TIMBER SUPPLY AREA	6	Peace TSA (Inactive; kept for historical purposes)
U - TIMBER SUPPLY AREA	7	Golden TSA
U - TIMBER SUPPLY AREA	8	Fort Nelson TSA
U - TIMBER SUPPLY AREA	9	Invermere TSA
U - TIMBER SUPPLY AREA	10	Kalum TSA
U - TIMBER SUPPLY AREA	11	Kamloops TSA
U - TIMBER SUPPLY AREA	12	Kispiox TSA
U - TIMBER SUPPLY AREA	13	Kootenay Lake TSA
U - TIMBER SUPPLY AREA	14	Lakes TSA
U - TIMBER SUPPLY AREA	15	Lillooet TSA
U - TIMBER SUPPLY AREA	16	MacKenzie TSA
U - TIMBER SUPPLY AREA	17	Robson Valley TSA
U - TIMBER SUPPLY AREA	18	Merritt TSA
U - TIMBER SUPPLY AREA	19	Mid Coast TSA
U - TIMBER SUPPLY AREA	20	Morice TSA
U - TIMBER SUPPLY AREA	21	North Coast TSA
U - TIMBER SUPPLY AREA	22	Okanagan TSA
U - TIMBER SUPPLY AREA	23	100 Mile House TSA
U - TIMBER SUPPLY AREA	24	Prince George TSA
U - TIMBER SUPPLY AREA	25	Queen Charlotte TSA
U - TIMBER SUPPLY AREA	26	Quesnel TSA
U - TIMBER SUPPLY AREA	27	Revelstoke TSA
U - TIMBER SUPPLY AREA	29	Williams Lake TSA

MANAGEMENT UNIT		
TYPE	ID	NAME
U - TIMBER SUPPLY AREA	30	Fraser TSA
U - TIMBER SUPPLY AREA	31	Soo TSA
U - TIMBER SUPPLY AREA	32	Quadra TSA (Inactive; kept for historical purposes)
U - TIMBER SUPPLY AREA	33	Kingcome TSA
U - TIMBER SUPPLY AREA	34	Nootka TSA (Inactive; kept for historical purposes)
U - TIMBER SUPPLY AREA	35	Island TSA (Inactive; kept for historical purposes)
U - TIMBER SUPPLY AREA	36	Meziadin TSA (Inactive; kept for historical purposes)
U - TIMBER SUPPLY AREA	37	Strathcona TSA
U - TIMBER SUPPLY AREA	38	Arrowsmith TSA
U - TIMBER SUPPLY AREA	39	Sunshine Coast TSA
U - TIMBER SUPPLY AREA	40	Fort St. John TSA
U - TIMBER SUPPLY AREA	41	Dawson Creek TSA
U - TIMBER SUPPLY AREA	42	Cranberry TSA
U - TIMBER SUPPLY AREA	43	Nass TSA
T - TREE FARM LICENCE	1	TFL 01 Port Edward
T - TREE FARM LICENCE	3	TFL 03 Little Slocan
T - TREE FARM LICENCE	5	TFL 05 Mac-Cariboo
T - TREE FARM LICENCE	6	TFL 06 Quatsino
T - TREE FARM LICENCE	8	TFL 08 Boundary
T - TREE FARM LICENCE	10	TFL 10 Toba
T - TREE FARM LICENCE	13	TFL 13 Blue River
T - TREE FARM LICENCE	14	TFL 14 Spillimacheen
T - TREE FARM LICENCE	15	TFL 15 Inkaneep
T - TREE FARM LICENCE	18	TFL 18 Clearwater
T - TREE FARM LICENCE	19	TFL 19 Tahsis
T - TREE FARM LICENCE	23	TFL 23 Arrow Lakes
T - TREE FARM LICENCE	24	TFL 24 Moresby
T - TREE FARM LICENCE	25	TFL 25 Naka
T - TREE FARM LICENCE	26	TFL 26 Mission
T - TREE FARM LICENCE	30	TFL 30 Sinclair
T - TREE FARM LICENCE	33	TFL 33 Sicamous
T - TREE FARM LICENCE	35	TFL 35 Jamieson Ck

MANAGEMENT UNIT		
TYPE	ID	NAME
T - TREE FARM LICENCE	37	TFL 37 Nimpkish
T - TREE FARM LICENCE	38	TFL 38 Squamish
T - TREE FARM LICENCE	39	TFL 39 Haida
T - TREE FARM LICENCE	41	TFL 41 Kitimat
T - TREE FARM LICENCE	42	TFL 42 Tanizul
T - TREE FARM LICENCE	43	TFL 43 Fraser-Homathco-Kingcome
T - TREE FARM LICENCE	44	TFL 44 Alberni
T - TREE FARM LICENCE	45	TFL 45 Cordero-Knight
T - TREE FARM LICENCE	46	TFL 46 West Coast
T - TREE FARM LICENCE	47	TFL 47 Duncan Bay
T - TREE FARM LICENCE	48	TFL 48 Chetwynd
T - TREE FARM LICENCE	49	TFL 49 Okanagan
T - TREE FARM LICENCE	51	TFL 51 Cranberry
T - TREE FARM LICENCE	52	TFL 52 Bowron-Cottonwood
T - TREE FARM LICENCE	53	TFL 53 Naver
T - TREE FARM LICENCE	54	TFL 54 Maquinna
T - TREE FARM LICENCE	55	TFL 55 Selkirk
T - TREE FARM LICENCE	56	TFL 56 Goldstream
T - TREE FARM LICENCE	57	TFL 57 Clayoquot

Appendix C: Code Tables

AMENDMENT TYPE	ROAD_AMENDMENT_TYPE_CODE	DESCRIPTION
	REENG	Re-engineering
	SHORTENING	Removing
	INCREASE	Adding

APPLICATION PURPOSE	APPLICATION_PURPOSE_CODE	DESCRIPTION
	N	New
	A	Amendment

CAPTURE METHOD	CAPTURE_METHOD_CODE	DESCRIPTION
	Photogrammetric	Photogrammetric
	coordinateGeometryWithControl	coordinateGeometryWithControl
	differentialGPS	differentialGPS
	monoRestitution	monoRestitution
	nondifferentialGPS	nondifferentialGPS
	orthoPhotography	orthoPhotography
	rubberSheeting	rubberSheeting
	satelliteImagery	satelliteImagery
	scanning	scanning
	sketchMap	sketchMap
	tabletDigitizing	tabletDigitizing
	unknown	unknown

CUT REGULATION	CUT_REGULATION_CODE	DESCRIPTION
	BBR	Bark Beetle

DATA SOURCE	DATA_SOURCE_CODE	DESCRIPTION
	AP	Air Photo
	CDMS	CDMS
	FC1	Forest Cover Maps
	SAT	Satelite
	SUR	Survey
	TRIM	TRIM
	UNK	Unknown

FILE TYPE	FILE_TYPE_CODE	DESCRIPTION
	B01	Road Permit
	B40	Forest Service Road
	S01	Special Use Permit, Forest
	S02	Special Use Permit, Non-Forest

SPECIAL USE	SPECIAL_USE_CODE	DESCRIPTION
	19	Road, Right of Way

Appendix B: RRS Schema v1

Road Tenure Attribute Details

FIELD	SCHEMA 1	DETAILS
Forest File ID Number	Conditional	The Forest File ID or Road Tenure number assigned by the FLNRORD to the tenure. For FSRs the Forest File ID is the number given by Property Services for the new FSR. (see note above), and must be included in the submission document RPs (B01) and rSUPs • Optional for New • Required for Amendments FSRs (B40) • Required for New • Required for Amendments
File Type	Conditional	This is a code that identifies the type of permit. Licensee use: • B01 - Road Permit and • S01, S02 – Road Special Use Permit BCTS use: • B01 - Road Permit • B40 – FSR, and • S01, S02 – Road Special Use Permit FLNRORD use: • B40 – FSR and • S01, S02 – Road Special Use Permit Required for New applications Not Required for a Road Permit/Road Special Use Permit/FSR Amendment.
Application Description	Required	Written description of the reason for the application or amendment. **Note:** XML reserved characters cannot be used. See note above.
District Code	Yes	Enter the three letter code for each district. See http://www.for.gov.bc.ca/his/ft/techspec/ for complete list of codes.
Cascade Split Code	Removed from Schema	

FIELD	SCHEMA 1	DETAILS
Management Unit Type	Conditional	Code to indicate the type of Management Unit the Road Permit is within. Use **T** if applicable to the Tenure, use **U** for all other tenures.
		Required for New Submissions
		Optional for Amendment Submissions
		Valid Codes:
		For Licensee use:
		U - TSA
		T – TFL and Timber Licences (inside of TFL)
		For FLNRO use:
		F – Woodlot
		C – Community Forest
		Z – Timber Licence (outside of TFL)
Management Unit ID	Conditional	Number to identify the Management Unit.
		Management Unit Type:
		Tree Farm Licenses (T) it is the TFL number (e.g. for TFL 35 it is 35).
		Timber Supply Areas (U) it the TSA area (e.g. for the Kamloops TSA it is 11).
		See Appendix A for a list.
Associated Submission	Optional	This field is used to indicate if another ESF submission was made in conjunction with this one and may require Ministry evaluation at the same time. For example if a CP and a Road were submitted at the same time and may require review and approval simultaneously.
Application Purpose	Required	**"N"** - to indicate a New RP/FSR
		"A" - to indicate an Amended RP/FSR
BCTS Office	Conditional	Required if the submission is BCTS funded
		Valid Entry: BCTS Org Unit Code

Road Section/Branch Attribute Details

FIELD	SCHEMA 1	DETAILS
Road Section ID	Required	This field represents the Road Section ID for Road Permits/road Special Use Permits and this field represents the Branch ID for FSRs. For RPs and rSUPs it is a 30 character alphanumeric string. For FSRs it is a 3 character numeric string. Enter the numbers and/or letters to identify the road section/branch. Usually this name will be logical and have business significance to the agreement holder. FSRs it is the FSR project number followed by the branch number (i.e. 12345.03). **Note:** XML reserved characters cannot be used. See note above**.**
Road Name	Optional	An alternate or local road name. The Road Name is NOT the Road Section identifier. **Note:** XML reserved characters cannot be used. See note above.
Associated Tenure Permit	Optional	Used to indicate to the Ministry/District what Tenure or Permit the road is associated to in order to aid in the timber mark assignment to segments for RPs.
Application Purpose	Required	An existing road that is being added to the RP/FSR would be a New Road Section/Branch whereas a change in the geometry of a Road Section/Branch already covered by the RP/FSR would be an Amendment. **Valid Entries:** **"N"** - to indicate a New Road Section/Branch **"A"** - if it is an Amendment to a Road Section/Branch already covered by the RP/FSR **"R"** - if it is a Retirement of a Road Section/Branch
Adjudication Comment	Optional	This comment is informational and added by the licensee submitter to aid the District in evaluating the submission. For any conflicts that may arise, perhaps referrals that were performed along with the name and number of the contact person or other pertinent information for any potential conflicts would be entered here. This will help to speed up the status and clearance process.

Field	Schema 1	Details
Tenure Width	Conditional	Required for rSUP only. This specifies the tenure width (in meters) of the rSUP. This is the total width of tenure (half of this width will lay on each side of the centre line). The minimum road rSUP width is 20m and the maximum is 75m. This field is not required for rSUP Retirements (i.e. Application Purpose = R). **Note:** If Road width is provided in RP and FSR, it will not be used. Tenure width for FSRs and RPs defaults to the regulation width of 75m.
Amendment Start Station	Conditional	Required for all amendments (i.e. Application purpose = **A**). This field should not be included in new submissions (i.e. application purpose = **N**), or in retirement submissions (i.e. application purpose = **R**). The road station where the amendment starts (in kms) of the road section/branch being amended. **Examples:** Amendment to Lengthen - where Road Section R-100 is 2km long, and is being amended to add 1km to the end of existing R-100, the Amendment Start Station is "2". Amendment to Shorten - where Road Section R-200 is 6km long, and is being amended to shorten the road by 2km from the end of existing R-200, the Amendment Start Station is "0"
Amendment End Station	Conditional	Required for all amendments (i.e. Application purpose = **A**). This field should not be included in new submissions (i.e. application purpose = **N**), or in retirement submissions (i.e. application purpose = **R**). The road station where the amendment ends (in kms), of the road section being amended. **Examples** Amendment to Lengthen - where Road Section R-100 is 2km long, and is being amended to add 1km to the end of existing R-100, the Amendment End Station is "3". Amendment to Shorten - where Road Section R-200 is 6km long, and is being amended to shorten the road by 2km from the end of existing R-200, the Amendment End Station is "4".

FIELD	SCHEMA 1	DETAILS

Amendment Type	Conditional	<u>Required for all Road Section Amendments</u> (i.e. application purpose = **A**). This field should not be included in new submissions (i.e. application purpose = **N**), or in retirement submissions (i.e. application purpose = **R**).
		
		NOTE: <u>The following codes have changed</u> with the new RRS schema:
		
		    REENG – amendment to change the road layout due to re-alignment of the original road planned (was REN)
		
		    SHORTENING – amendment to shorten the length of the road to be built vs what was previously submitted for that section (was RMV)
		
		    INCREASE – amendment to lengthen the road to be built vs what was previously submitted for that section (was ADD)

Appendix C: RRS Schema v1 Example Submission

Example submission of a new B01 road permit
New, optional fields are in blue, bold

```xml
<?xml version="1.0" encoding="utf-8"?>
<esf:ESFSubmission xmlns:esf="http://www.for.gov.bc.ca/schema/esf"
                   xmlns:gml="http://www.opengis.net/gml"
                   xmlns:xlink="http://www.w3.org/1999/xlink"
                   xmlns:mof="http://www.for.gov.bc.ca/schema/base"
                   xmlns:rrs="http://www.for.gov.bc.ca/schema/rrs"
                   xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
                   xsi:schemaLocation="http://www.for.gov.bc.ca/schema/esf
                   http://www.for.gov.bc.ca/schema/esf/1/xsd/MOF/esf-submission.xsd
                   http://www.for.gov.bc.ca/schema/rrs http://www.for.gov.bc.ca/schema/rrs/1/xsd/MOF/mof-rrs.xsd">
 <esf:submissionMetadata>
  <esf:emailAddress>anne-marie.bujold@cgi.com</esf:emailAddress>
  <esf:telephoneNumber>2503833934</esf:telephoneNumber>
 </esf:submissionMetadata>
 <esf:submissionContent>
  <rrs:RRSSubmission>
   <gml:boundedBy>
    <gml:null>inapplicable</gml:null>
   </gml:boundedBy>
   <rrs:submissionMetadataProperty>
    <rrs:SubmissionMetadata>
     <rrs:districtCode>DCK</rrs:districtCode>
     <rrs:clientCode></rrs:clientCode>
     <rrs:clientLocationCode></rrs:clientLocationCode>
    </rrs:SubmissionMetadata>
   </rrs:submissionMetadataProperty>
   <rrs:submissionItem>
    <rrs:RoadTenureApplication>
     <gml:boundedBy>
      <gml:null>inapplicable</gml:null>
     </gml:boundedBy>
     <rrs:fileType>B01</rrs:fileType>
     <rrs:applicationDescription>Example Submission for a new B01 road</rrs:applicationDescription>
     <rrs:district>DCK</rrs:district>
     <rrs:managementUnitType>U</rrs:managementUnitType>
     <rrs:managementUnitID>19</rrs:managementUnitID>
     <rrs:associatedSubmission>A78543 CP9</rrs:associatedSubmission>
     <rrs:applicationPurpose>N</rrs:applicationPurpose>
     <rrs:roadSectionMember>
      <rrs:RoadSection>
       <mof:spatialMetaData>
        <mof:dataSourceCode>Unknown</mof:dataSourceCode>
        <mof:captureMethodCode>Unknown</mof:captureMethodCode>
       </mof:spatialMetaData>
       <rrs:roadSectionID>test section</rrs:roadSectionID>
       <rrs:roadName>Question</rrs:roadName>
       <rrs:associatedTenurePermit></rrs:associatedTenurePermit>
       <rrs:applicationPurpose>N</rrs:applicationPurpose>
       <rrs:adjudicationComment>This is a sample of the optional adjudication comment should the submitter be required to explain
possible conflicts </rrs:adjudicationComment>
```

```
      <rrs:centreLineOf>
       <gml:LineString srsName="EPSG:42102">
        <gml:coordinates></gml:coordinates>
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     </rrs:RoadSection>
    </rrs:roadSectionMember>
    <rrs:roadSectionMember>
     <rrs:RoadSection>
      <mof:spatialMetaData>
       <mof:dataSourceCode>Unknown</mof:dataSourceCode>
       <mof:captureMethodCode>Unknown</mof:captureMethodCode>
      </mof:spatialMetaData>
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      <rrs:roadName>D1</rrs:roadName>
      <rrs:applicationPurpose>N</rrs:applicationPurpose>
      <rrs:centreLineOf>
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       </gml:LineString>
      </rrs:centreLineOf>
     </rrs:RoadSection>
    </rrs:roadSectionMember>
   </rrs:RoadTenureApplication>
  </rrs:submissionItem>
 </rrs:RRSSubmission>
</esf:submissionContent>
</esf:ESFSubmission>
```

Example Road Application submission for Amendment

```
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xmlns:xlink="http://www.w3.org/1999/xlink" xmlns:mof="http://www.for.gov.bc.ca/schema/base"
xmlns:rrs="http://www.for.gov.bc.ca/schema/rrs" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.for.gov.bc.ca/schema/esf http://www.for.gov.bc.ca/schema/esf/1/xsd/MOF/esf-submission.xsd
http://www.for.gov.bc.ca/schema/rrs http://www.for.gov.bc.ca/schema/rrs/1/xsd/MOF/mof-rrs.xsd">
        <esf:submissionMetadata>
                <esf:emailAddress> </esf:emailAddress>
                <esf:telephoneNumber></esf:telephoneNumber>
        </esf:submissionMetadata>
        <esf:submissionContent>
          <rrs:RRSSubmission>
                <gml:boundedBy>
                        <gml:null>inapplicable</gml:null>
                </gml:boundedBy>
            <rrs:submissionMetadataProperty>
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                <rrs:clientCode></rrs:clientCode>
                <rrs:clientLocationCode></rrs:clientLocationCode>
              </rrs:SubmissionMetadata>
            </rrs:submissionMetadataProperty>
            <rrs:submissionItem>
              <rrs:RoadTenureApplication>
                <gml:boundedBy>
```

```
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        </gml:boundedBy>
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    <rrs:fileType>B01</rrs:fileType>
    <rrs:applicationDescription>#R02006-2021-01</rrs:applicationDescription>
    <rrs:district>DNI</rrs:district>
    <rrs:managementUnitType>U</rrs:managementUnitType>
    <rrs:managementUnitID>33</rrs:managementUnitID>
    <rrs:applicationPurpose>A</rrs:applicationPurpose>
      <rrs:roadSectionMember>
        <rrs:RoadSection>
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            </rrs:centreLineOf>
        </rrs:RoadSection>
     </rrs:roadSectionMember>
     <rrs:roadSectionMember>
        <rrs:RoadSection>
          <rrs:roadSectionID>2450</rrs:roadSectionID>
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            <rrs:applicationPurpose>A</rrs:applicationPurpose>
            <rrs:amendmentStartStation>1.25</rrs:amendmentStartStation>
            <rrs:amendmentEndStation>2.602</rrs:amendmentEndStation>
            <rrs:amendmentType>INCREASE</rrs:amendmentType>
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```

```
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                    </rrs:centreLineOf>
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