A photograph of a two-lane asphalt road curving through a lush green forest. The road is marked with white dashed lines and yellow center lines. A metal guardrail runs along the left side. In the background, a large, densely forested mountain rises under a clear sky.

# Introduction

Welcome to the Roadway Inventory Management System (RIMS) Tutorial. This guide is a companion to the *RIMS Business Guide* and the *RIMS User Guide*. This tutorial contains specific use cases and detailed examples that will introduce you to the tasks, screens, and data inputs necessary to successfully use RIMS.

This guide contains four sections. These are:

1. Introduction...
2. Types of Road Changes...
3. Examples...
4. Appendix...

## The Road Inventory

**What is the Road Inventory?** The road inventory contains important information about the public roads in the state of Virginia. It includes data such as the road name, route number, length, and location. It also includes physical characteristics such as the number of lanes and pavement type. Road ownership and maintenance responsibility are also stored in the inventory.

**What is the Road Inventory used for?** The road inventory is crucial for project development, maintenance, and operations tasks. Some important tasks that might require the road inventory include highway safety analysis, traffic monitoring, and pavement management. External reporting requirements, such as reporting to FHWA and the HPMS, also require the road inventory data. Fulfilling the road inventory requirements are crucial to securing Federal funding for VDOT.

**What data are stored in the Road Inventory?** The amount of data stored in the inventory is dependent on the agency that maintains the road. Only public roads that are maintained by VDOT are required to have detailed inventory data. The data include mapping data, physical characteristics, and administrative characteristics, such as ownership.

The road inventory also contains a mapping component, which links the inventory data to location data in the VDOT GIS map. The geospatial road inventory incorporates some road centerlines provided by the Virginia Geographic Information Network (VGIN). The map data are provided to GIS Integrator 2.0 to link relate the road inventory data to a geographic location and route number.

**How does RIMS relate to the Road Inventory?** In order to ensure the accuracy of the road network, VDOT continues to update the road inventory when new roads are constructed, changes are made to current roads, and roads are removed. These functions require the use of RIMS.

For a complete list of data included in the road inventory, refer to **Appendix A**.

## **Database for Administering Changes to the Highway System (DACHS)**

**What is DACHS?** The Database for Administering Changes to the Highway System (DACHS) is used to manage the legal roadway acceptance process.

**What projects are initiated in DACHS?** DACHS is used to input new roadways that require official acceptance or approval. Approval can be required by any one of three entities:

- Local Governing Bodies (LGBs);
- the Commonwealth Transportation Board (CTB);
- and/or the VODT Commissioner (or his designee).

The primary function of DACHS is to assist staff with completing the necessary steps and forms to legally accept a road. The projects that are typically entered through DACHS include:

- Additions;
- Abandonments;
- Discontinuances;
- Transfers;
- Route renumbering, and;
- Annexation and de-annexation

For more information on the road changes that are required to be initiated in DACHS, including information on the route designation and the necessary source of approval, refer to **Appendix B**.

For a complete list of the required data and valid inputs, refer to **Section 2.1** or **Appendix A**.

**What information does DACHS require?** DACHS requires the user to enter basic inventory data on the roadway, such as the project name, location, project type, street name and description, mileage, number of through lanes, and median type.

**What is the final output from DACHS?** When the required information has been entered, and the project has been reviewed and authorized, DACHS creates an Inventory Change Request (ICR). The ICR is then sent to the Roadway Inventory Management System (RIMS).



## Roadway Inventory Management System (RIMS)

**What is RIMS?** RIMS is used to manage road inventory data and to store the Official Roadway Data Inventory for Virginia. RIMS assists with managing the road inventory data, by making changes and adding data to the existing road network.

The major functions of RIMS are to:

- Maintain information in the **Road Inventory** including physical, administrative, and operational characteristics;
- Maintain the **Route Inventory** required for linear referencing;
- Assist in the process for **Inventory Changes**;
- **Integrate** with GIS Integrator 2.0 to maintain map data;
- and create **Reports**.

**How do you open a project in RIMS?** Projects are opened in RIMS using the Inventory Change Request (ICR). Note: the ICR is typically initiated in DACHS. Projects that do not require approval and are not initiated in DACHS can be created directly in RIMS with a “miscellaneous ICR”.

**What data does RIMS require?** In addition to the basic inventory data provided in the ICR, RIMS requires detailed roadway data. This includes \_\_\_\_\_.

In addition to location data, RIMS also requires a visual representation of the new roadway, sometimes called the “sketch”. If no sketch is available, the user can create one using

For more information on:

- The Redline tool, refer to Section 2.4.
- Submitting a project to TMPD, refer to Section 4.1.
- Reviewing and completing a project in RIMS, refer to Section 4.2.
- Reserving route numbers in RIMS, refer to Section 2.3.
- Querying data in RIMS, refer to Section 3.5.

the Redline tool. This information provides the basis for the road centerline.

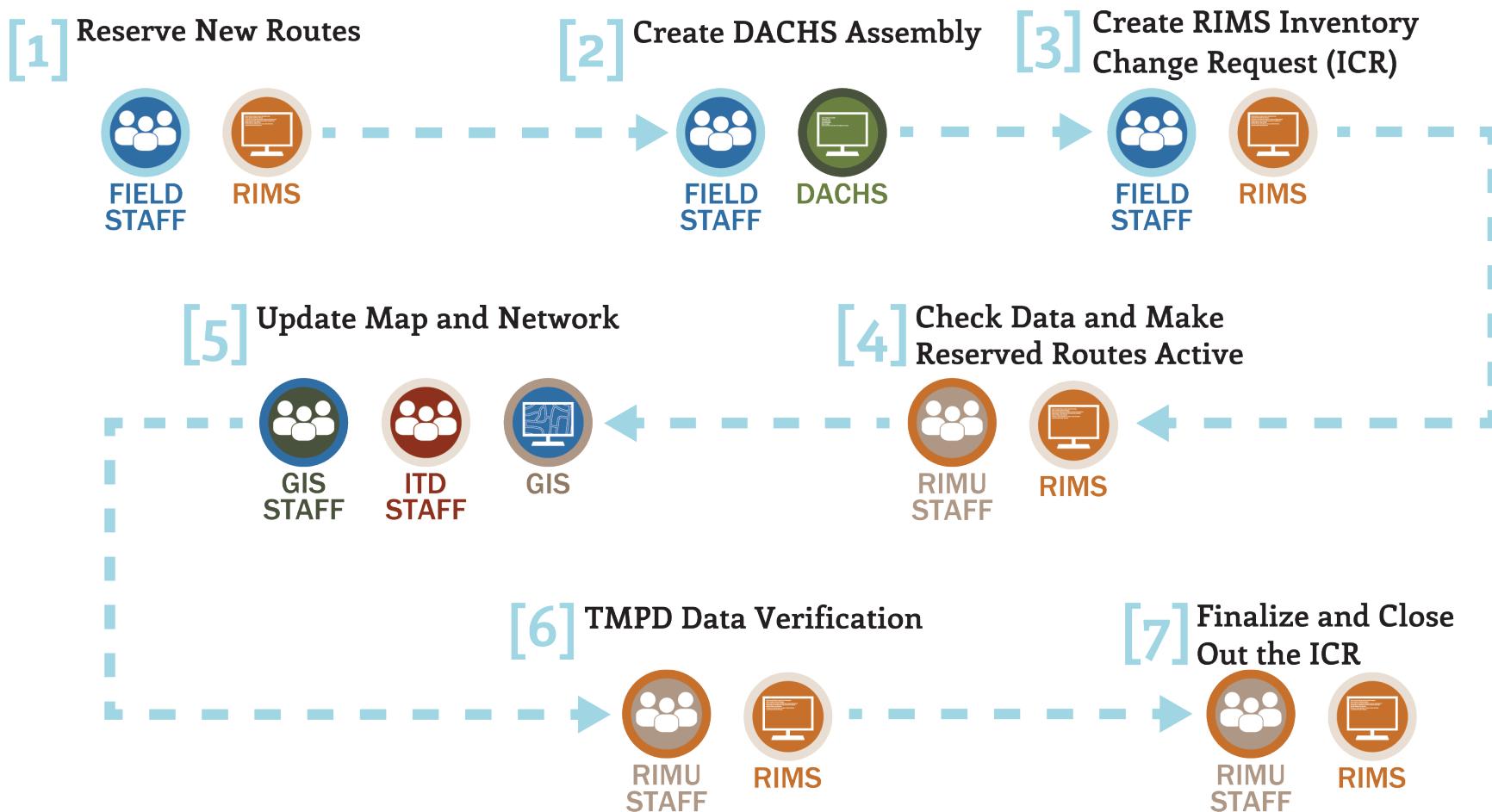
**What happens when an ICR is submitted for CET/LRS processing?** When the appropriate data have been input in RIMS (complete with a drawing, road location, and route number) the data is sent to the Centerline Editors and RIMU Staff. The centerline editors add and/or modify route centerlines using the Centerline Editing Toolset (CET). When the road has been successfully added to the RCL with accurate mileage and location, the RIMU editors review the map. These steps ensure that the roadway has been accurately located on the map, as the route centerline will be linked to the corresponding inventory data.

**What other tasks can RIMS perform?** In addition to editing the road inventory, RIMS can be used to reserve route numbers. This function is particularly important for developers creating subdivisions and other large projects that will generate a number of new roadways. In this case, multiple route numbers can be reserved at one time to ensure continuity. RIMS can also be used to query the road inventory.

*Create a map output...*

## DACHS and RIMS in Action

To update the inventory using RIMS and DACHS, the following workflow shows the basic steps that should be taken, the staff responsible for completing each tasks, and the software that will be utilized. **Section 2** will elaborate on this workflow and specify the different processes for each type of edit to the road inventory.



## Section II: Types of Road Changes

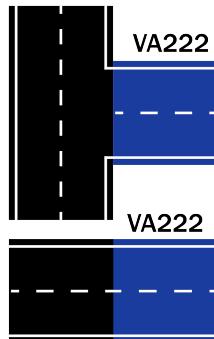
This section provides basic example steps for each type of adjustment that can be made in RIMS. Each description provides additional resources for a more detailed understanding of the process.

The two companion guides referenced in this section are the *RIMS Business Guide* and the *RIMS User Manual*. The *Business Guide* provides an overview and processes for inventory updating, and general step-by-step instructions for performing basic tasks. The *User Manual* provides more detailed instructions for using each screen of the RIMS application.



The following shows each of the road change types that can be completed in RIMS. This diagram will be grouped by type (i.e. the categories used in the draft outline).

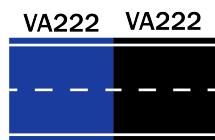
## DACHS Addition



Addition (ADTN)

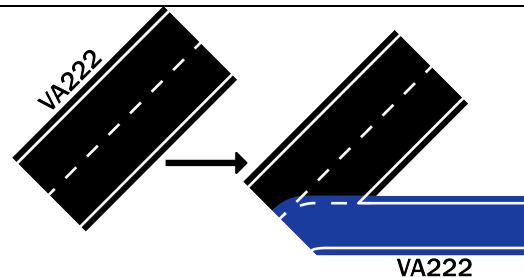
An Addition (ADTN) is used for a new route (using a new route number) or an extension to the end of a route (continuing the same route number).

\*add an arrow to the directional diagrams (here and below)



Realignment:  
Add (RALN)

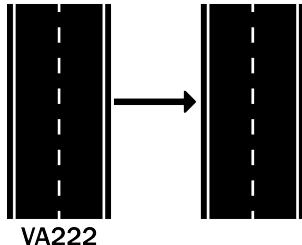
A Realignment: Add (RALN) is used for an extension to the beginning or middle of an existing route. A realignment uses the same route number but changes the length and/or the starting point of the route.



Realignment:  
Add (RLAN)

A Realignment: Add (RLAN) is used for an extension to the beginning or middle of an existing route on a new alignment.

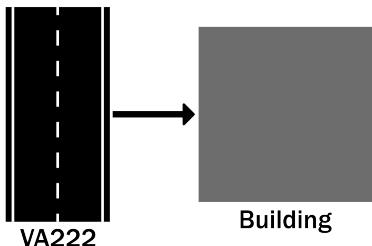
## DACHS Abandonment



Abandonment  
(ABAN)

An Abandonment (ABAN) is used if the roadway is:

- Not being used and/or maintained,
- The abandoned section is not being replaced by a new road (called an isolated abandonment), and
- The road being abandoned still exists.

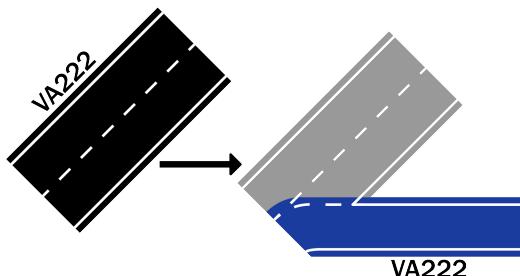


Delete (DELE)

A Delete (DELE) is used if the roadway is:

- Not being used and/or maintained,
- The abandoned section is not being replaced by a new road (called an isolated abandonment), and

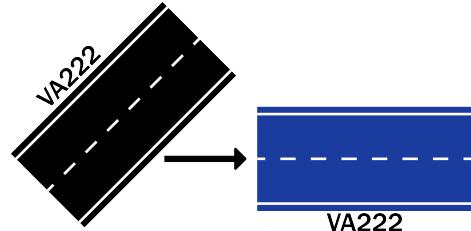
The road has been physically removed (for example, replaced by buildings).



Realignment:  
Abandonment  
(RABA)

Labeled as an “Abandon” in DACHS.

A Realignment: Abandonment (RABA) is used when an abandonment is happening at the same time as a realignment and the road being abandoned is still physically intact. This means that a route is being re-routed, although the initial route still exists.

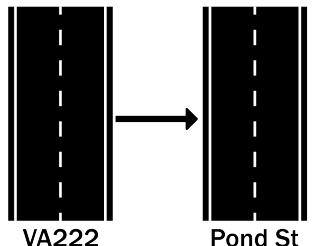


Realignment:  
Delete (RDEL)

Labeled as an “Abandon” in DACHS.

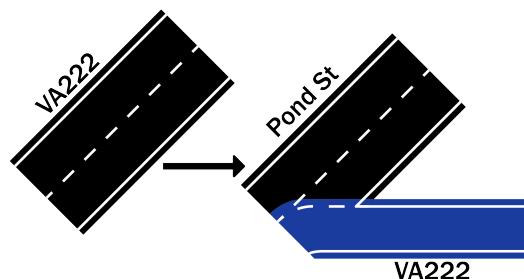
A Realignment: Delete (RDEL) is used when a abandonment is happening at the same tie as a realignment and the road has been physically removed. This means that the route is being re-routed and the initial route has been removed.

## DACHS Discontinuance



Discontinuance  
(DICO)

A Discontinuance (DICO) is used for an isolated discontinuity (the abandoned section is not being replaced by a new road). This means that the route number will be removed. This typically occurs when VDOT stops maintaining a roadway.

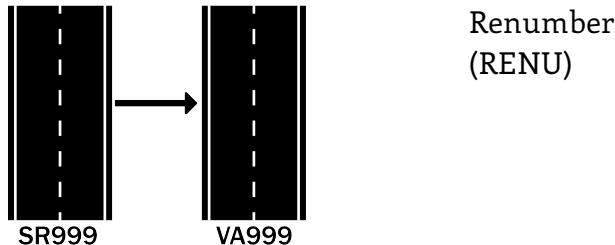


Realignment:  
Discontinuance  
(RDIC)

Labeled as a “Discontinuance” in DACHS.

A Realignment: Discontinuance (RDIC) is used when a realignment is taking place at the same time as a discontinuity.

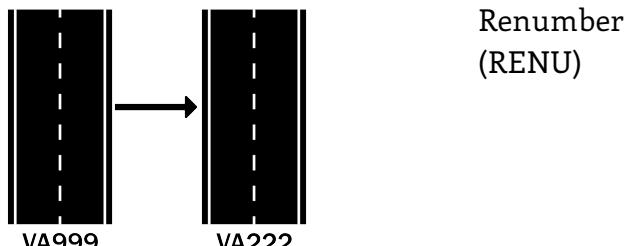
## DACHS Transfer



A Renumber (RENU) is used for when a route is given a new route number. This can occur when a road changes classification or is transferred across highways systems.

Note: When a renumber occurs, the existing route is always removed from the centerline.

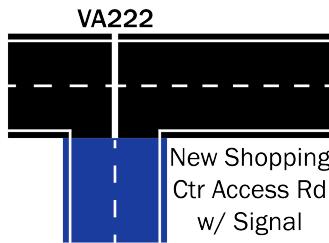
## DACHS Renumber



A Renumber (RENU) is used for when a route is given a new route number. This can occur when a road changes classification or is transferred across highways systems.

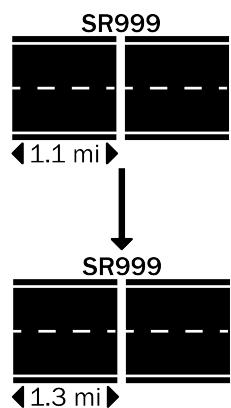
Note: When a renumber occurs, the existing route is always removed from the centerline.

## DACHS Data Correction



Split (SPLT)

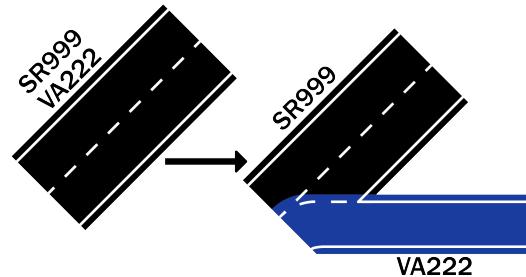
A Split (SPLT) is used if a new intersection is added to an existing road section.



Length  
Correction  
(LENC)

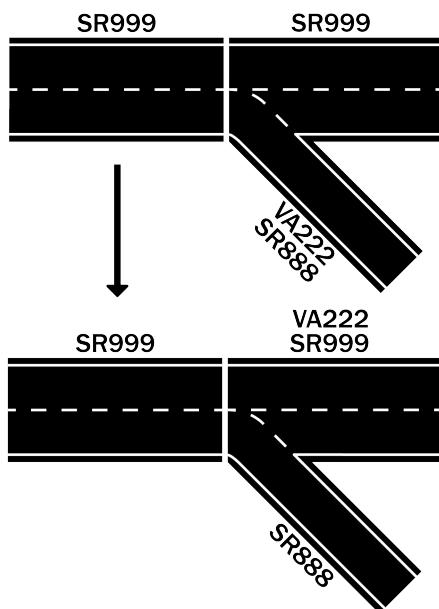
A Length Correction (LENC) is used if the only change being reported is a correction to the mileage of an existing road section.

## RIMS Miscellaneous ICR



Realignment:  
Remove (RREM)

A Realignment: Remove (RREM) is used to remove an existing overlapping route from a centerline as part of a realignment.

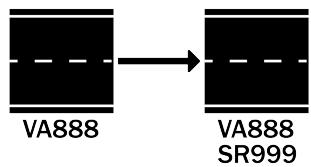


Assign Route  
(ASSN)  
(used to describe  
the new location  
for the route)

An Assign Route (ASSN) is used to assign a new overlap route to an existing centerline.

Realignment:  
Remove (RREM)  
(used to describe  
the old location  
for the route)

A Realignment: Remove (RREM) is used to remove an existing overlapping route from a centerline as part of a realignment.



Assign Route  
(ASSN)

An Assign Route (ASSN) is used to assign a new overlap route to an existing centerline.

# Section III: Examples

## Addition

### Defining an Addition

Additions to the road network are created as a result of new construction. Additions can be new roadways that will be assigned a new route number, or extensions to the end of existing routes. **It is important to note that extending either the beginning or the middle of an existing route is not considered an addition.**

The following are some examples of an addition to the road network:

- A town recently acquired land to create a public park. In order to encourage visitors and provide parking, a new road is built, perpendicular to an existing roadway, to provide access to the new parking lot built on the site.
- With the increasing demand for housing, a developer decides to extend an existing dead-end street in order to build more houses along the route.

### The Scenario

For these instructions, we will establish a scenario to guide one through the process of creating an addition.

Assume that a developer is creating a new subdivision called Springvale Estates. The project will be completed in three phases and new housing will be added during each phase. In addition to the new homes, the developer will also be building roads to improve access to the neighborhood. When all three phases have been completed in January 2015, eight new roadways will be added to the inventory. During the first phase of construction, the developer will be adding a single road called Springvale Meadow Lane. When the road is completed, the responsibility for the road segment will be transferred to the county. In order to integrate the road with the road inventory, the county will have to assign a new route number to Springvale Meadow Lane. The county will then be responsible for any future maintenance.

**What makes this scenario unique?** Every addition is slightly different depending on the scenario. The following factors are important elements of this scenario, but might not apply to all additions:

- Because the project will take place in three phases, and new roadways will be added during each phase, the locality should request reserved route numbers ahead of time to ensure that all of the new routes in Springvale Estates will be assigned route

numbers that are sequential and contiguous (i.e. VA 889, VA890, VA891). This will make these roads easier to maintain in the future.

- Because the development is adding secondary roads to the road network, approval from the local Board of Supervisors will be required. The ICR will be initiated in DACHS.

When beginning a project it is important to consider all of the factors that make the project unique. **Appendix A** and **Appendix B** contain more information on all of the possible options for initiating a ICR, choosing the *PI* type, and the order in which tasks should be performed.

The following pages include documents that were submitted on behalf of Springvale Meadow Lane. These documents will provide the basis for the addition in DACHS and RIMS.

Form AM-4.0  
(Rev 08/08/2008)



**Commonwealth of Virginia**  
Virginia Department of Transportation

2013 APR 25 AM 9:37

**MEMORANDUM TO:**  
Maintenance Division  
**Attention:** Joseph Williams

April 19, 2013  
029 Springvale Estates  
County of Fairfax

**Central Office**

**Subject: Report of Changes to the VDOT Maintained Systems of State Highways**

029 Springvale Estates LGOV 01/29/2013  
The necessary form(s) reporting changes to highway systems maintained by the Department are attached, including, if applicable, a resolution passed by the governing body of the locality for any addition or abandonment of a roadway of the secondary system of state highways.

<b>A. New Additions      This assembly reports changes due to construction. Fees do not apply</b>			
Cash Bond	Escrow Agreement	Surety Dates	Name and Address of Surety firm:
Letter of Credit	Performance Bond	Issued: 4/19/2013	Not Required
✓ Other, approved by Maintenance		Expired: 4/19/2013	Not Required
Surety does not apply for this request		Recommended Expiration	Not Required
		April 19, 2013	Not Required

Surety, if required, is based on the Total Equivalent 1-Lane Mileage of this assembly: 0.48 assessed on the basis of 5 mileage tenths.

Instrument	Check number and Account Drawn Upon	Amount
Approved/Surety	Not Required	CSC 1100001, Fund 041000, RevAcct Formerly 042015 Now 027001
Maintenance Payment/ Inspection Fee	PNC Bank: 054000030, 5302606051, Check # 00399885; Amount \$1,250.00	CSC 1100001, Fund 041000, RevAcct Formerly 042015 Now 027001 \$750
Admin. Cost Recovery Fee	Included Above	CSC 1100001, Fund 041000, RevAcct Formerly 042015 Now 027001 \$500

**B. Rural Additions**

If Line G is greater than zero, the enclosed documentation includes proposed rural addition improvements.

Amounts on Line D are funds provided from other sources for this application, as more fully detailed in the attached Form LA-5.

If Line H is less than zero for either the funding or the mileage allowances, the proposed addition may not be added in the current fiscal year.

(Note: The term "RA Fund" in any form refers to the accumulated allocation balance held to improve qualifying roads that previously added to the secondary system of state highways. RA Funding is limited to 5% of the total annual primary secondary state construction allocation for the locality plus unobligated RA Funding funds, if any, from amounts budgeted for that purpose in the previous 3 consecutive fiscal years. The annual mileage allowance is limited to 1.25% of the total mileage in the locality's secondary system of state highways at the end of the previous calendar year.)

**C. Other Changes** See Form(s) AM4.2 enclosed.

Final/CUS Date LGB Res. Date Days for Resol. Days Processing

10/19/2012 1/29/2013 102 -182

*Joseph Williams*

District / Residency Authorized Agent

cc: Fiscal Division Administrator (w. checks) via District Accountant

Page 1

Form AM-4.1(Rev  
11/07/2006)



**Commonwealth of Virginia**  
Virginia Department of Transportation

Check List of Required Documents  
for Assemblies Reporting Changes to  
VDOT Maintained Highway Systems

Shaded items may not be required for the change described in the column headings.

Mark the appropriate column to show all contents of the assembly. Assembly Document or Item	SYSTEM ADDITIONS	SYSTEM DELETIONS
Show "new subdivision streets" in towns as "new subdivision streets."	New Sub-Div.	Rural Additions School Bus Loops
Resident Engineer's Transmittal Letter (if required to supplement Form LA-4)	-	Discontinuances
Form AM-4 and AM-4.1	✓	
Forms) AM-2 (1 per change per roadway segment)	✓	
Forms) AM-4 (HTRIS inventory input form)	✓	
Resolution of the Local Governing Body	✓	
Sketch depicting north arrow, arrangement of streets, distances between intersecting centerlines, split mileage along existing state roads to nearest intersecting state road or jurisdictional/corporate limit. (11 in x 17 in max)	✓	
Public hearing transcript and recommendation of the Residency Administrator.		
Copy of Maintenance Fee (original deposited with District Accountant)	✓	
Quitclaim Deeds) Attached (or Power, Communications, Pipelines, Utilities etc.)	-	
Agreement - Storm Water Management	-	
Agreement - Crossing of Dam	-	
Agreement - County controlled grade separation structure	-	
Agreement - Miscellaneous	-	
Copy of recorded plat showing roadway geometrics	✓	
Copy of recorded plat showing drainage and easements	✓	
Confirm: Drainage design has been checked by District Drainage	✓	
Confirm: Drainage and Streets are built in accordance with approved plans.	✓	
Confirm: Streets) meet VDOT's minimum standards	✓	
Confirm: Streets have been satisfactorily maintained since construction.	✓	
Confirm: Bridges, drainage structures meet Structure and Bridge Div. Sds	✓	
Confirm: As-Built plans received for bridges, drainage structures and County controlled grade separation	✓	
Confirm: All accounts receivables have been paid (testing, inspections, etc.)	✓	
Confirmed: signed permits for utilities (public or private) to occupy or cross the right of way are in hand awaiting notice of final acceptance	✓	
Project sketch (max 11 x 17) attached, showing street names and distances to all intersections and to existing intersections.		
Note: Some information in unshaded cells may not be required. If not required indicate N/A. If unsure, consult Maintenance Division.		
Assemble assembly documents in the following order:		
AM4.0	Quit Claim Deeds	
AM4.1	Reported Agreements	
Surety (if applicable)	AM-4 TRIS Form and Codes	
AM4.2s	Sketch (11 x 17 max)	
Resolution	Public Hearing Document for non-project Discontinuances	
AM4.3 (Resolution Attachment) (next column)	Miscellaneous documents	

**Complete this form manually**

*Joseph Williams*

Assembly Prepared by:

Phone Number: 703 254-2382

Page 2



Form AM-4.2  
Rev. 08/08/2008

## **Commonwealth of Virginia**

Virginia Department of Transportation

### **Report/Recommendation Regarding**

### **Change in the Secondary System of State Highways**

**Change Requested:**

County of Fairfax	029
County of Fairfax	29
Date of Resolution	1/29/2013
Index	Route No: Secondary Road - 10461 Old Rd. No:

Project/Subdivision	Springvale Estates			Proj Rte No.
Alias/Street Name	Springvale Meadow Lane			Length mi.
From	CL Springvale Rd (Rte 674) - 1.915 NE Dogwood Farm Ln (Rte 8188)			MPD#:
To	1.271 E to Beginning of Temp. Turnaround Easement			1
Public Service:	8 Houses			
Exist. pavement type	8" 21-A + 3" IM-19.0 + 1.5" SM-9.5			
Pavement Condition	New			
Right of Way Width (ft)	50 Feet	Land Record:	DB 16610 PG 1015-1078	Recorded: 10/19/2004
Remarks				

Estimated Constr Date:		PPMS Code:
Description:		
Description of work and section proposed:		
Estimated Cost to Improve		
Assured Financing - Sources and Amounts		
DOT Rural Addition Funds	\$0	
County/Landowner Funds	\$0	
Speculative Interest Prorata Share	\$0	
Revenue Sharing - County Contribution	\$0	
Revenue Sharing - CTB Match	\$0	
Other Funds	\$0	
Source of Other Funds		
		Sign and Date
Note: 6188.036 mi.		
(From) Rte. 10461, Springvale Meadow Lane. 0.24 mi. (To)		
8427.019 mi.		
<b>Salt Mileage Diagram for New Entrances to VDOT Roadways</b>		
Residency Administrator's Recommendation		
Recommended as proposed unless written otherwise.		4/19/2013
Residency and AHO:	Fairfax, 13	
<b>Maintenance Division</b>		
Authorized Staff Signature		

029 Springvale Estates LGOV 01/29/2013

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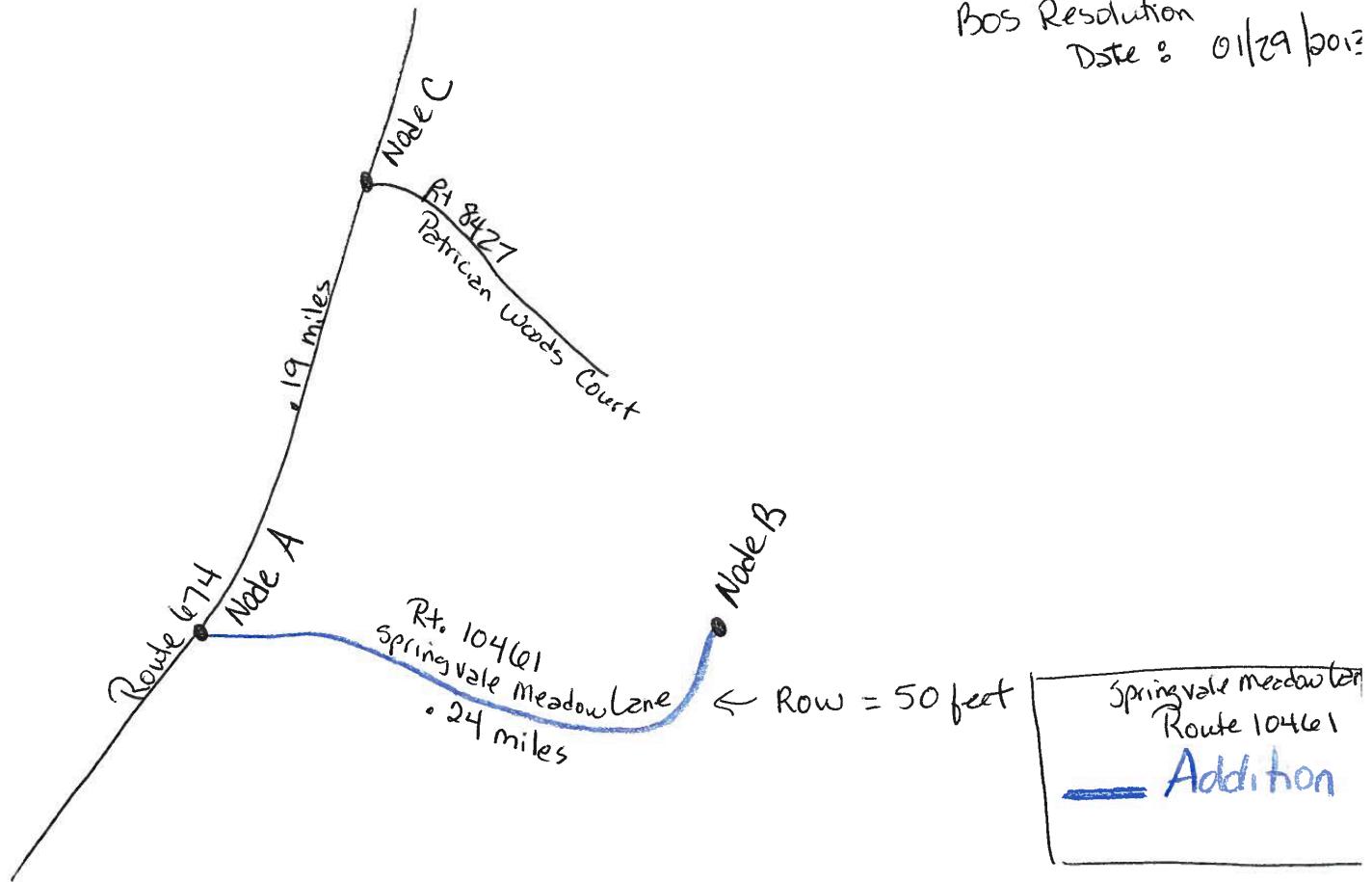
*Forms 4M-1-3, Page 1*

Page 4.2 of 4.2

District = NOVA  
Residency = Fairfax  
AHG = 10

Spring Vale Estates

BOS Resolution  
Date: 01/29/2012





**FIELD  
STAFF**



**RIMS**

## Reserve Route Numbers

Before creating an ICR, even before the road is completed, field staff can reserve route numbers for planned routes. Route numbers are reserved using RIMS. *It is important that the staff have \_\_\_\_\_ clearance in order to reserve a route number.* It is particularly important to reserve route numbers when a single project will contain multiple routes, as it will help later with inventory and maintenance tasks to have consecutive route numbers. This step is not required of all additions.

In the case of Springvale Estates, it is important to reserve route numbers for the following reasons:

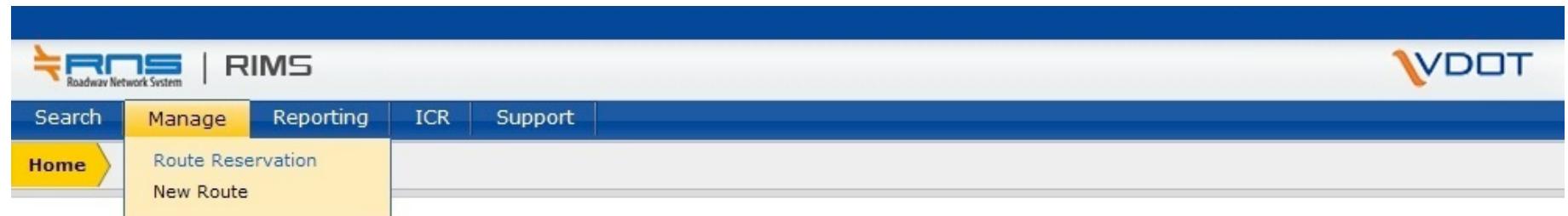
- The project is an addition, which means that the road segment is currently not assigned to a route number.
- The project will include multiple phases, resulting in multiple routes as part of a single project.

### What is the protocol for reserving numbers?

Although any available route number can be reserved, VDOT has established a set of guidelines that determine what numbers can be applied to what road types. These requirements are shown on page 20.

## What are the steps for reserving a route number?

The following shows the steps for reserving a route number using the Springvale Estates scenario.



**Step 1** On the RIMS Menu Bar, select “Manage” and “Route Reservation.”

**Step 2** Select the maintenance jurisdiction using one of two methods: sorting by **Name** or by **Code**. The **Maintenance Jurisdiction** for Springvale Estates is “Fairfax, County of – 029” which can be found by using the name, Fairfax, or the code, 029.

## Route Reservation

Select one or more criteria below to see the available route numbers.

Sort Jurisdiction By:  Name  Code

Maintenance Jurisdiction:   

**Step 3** Define the **Starting Route Number** Springvale Estates as “1000”, which, according to standard VDOT conventions, is the appropriate starting value for a Secondary subdivision addition.

Starting Route Number:  \*

Note: Subdivision streets begin with route 600.

The **Starting Route Number** is based on ranges that have been defined by VDOT. For more information on choosing a starting route number, refer to the graphic on page 24.

**Step 4** Define the **Number of Routes** for Springvale Estates as “1”, as only a single roadway will be entered into the road inventory during this phase.

Number of Routes:  \*

**Step 5** Define the **Subdivision** as “Springvale Estates.”

Subdivision:

The subdivision will be used to ensure that the route number selected will be applied to the right project once an ICR has been created.

**Step 6** Select “No” to indicate that Springvale estates is not a school road.

Search School Roads:  Yes  No

*Note: School roads are in the 9000 range only.*

If the roadway in question is a school road, the route number must follow certain conventions. Therefore it is important to specify if a segment is part of a school road.

**Step 7** If the roadway is divided or has many lanes, it is possible to reserve two route numbers: one for each direction. In this instance, all of the roadways that are being built within the development are two lanes, one in either direction. Therefore, the roadways will only require one route (which is the equivalent of one centerline in GIS). *\*\*IF the roadway has two directions, is it will automatically reserve the opposite route, if it is one way check that box...\*\*\*\**

Reserve Opposite Route:  Yes  No

**Step 8** When the following steps have been completed, click “Next.”

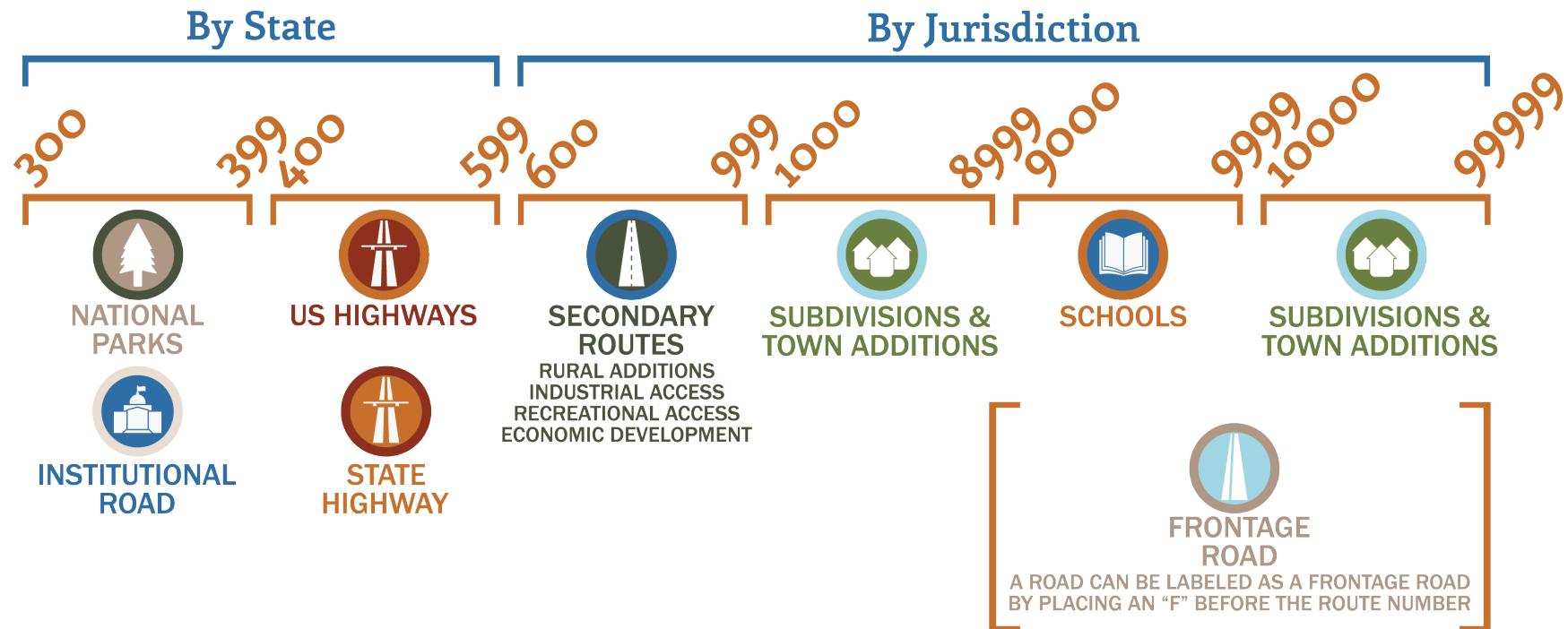
[Next](#) | [Cancel](#)

**Step 9** When...

When all the steps have been completed, RIMS will select a series of available route numbers based on the required number of routes and the “starting Route Number”. The numbers that appear on the screen are reserved.

For more information on reserving route number and a complete list of the characteristics that would require field staff to reserve a route number, refer to. **Appendix A**.

Route numbers should be assigned based on the type of road. This figure shows different types of roads and the range the route number must fall between. Certain types of roads, including national parks, institutional roads, and primary roads, are unique by State. This means that the route numbers used to define these road types, the numbers 300 through 599, can only be used once in the Commonwealth of Virginia. Other road types, including secondary routes, school roads, and subdivisions are unique by jurisdictions. This means that the route numbers used to define these roads types, the numbers 600 through 99999, can be used multiple times within the state, but only once per jurisdiction. When route numbers are displayed, either the state or jurisdiction code should be included. Also note that any road can be labeled as a frontage road by adding the letter "F" before the route number.





**FIELD  
STAFF**



**DACHS**

## Enter Initial Inventory Data

To begin making a change in the road inventory network, users should input initial data into the Database for Administering Changes to the Highway System (DACHS). This includes physical characteristics, number of through lanes, and median type in addition to ownership and maintenance responsibility for the new roadway. Primary and secondary additions require approval from either a LGB or the VDOT CTB, therefore DACHS is used to help manage the approval process. DACHS is also used to start an Inventory Change Request (ICR) that can be imported into RIMS.

In the case of Springvale Estates, DACHS should be used to initiate the ICR. This is because Springvale Meadow Lane is part of a subdivision, and therefore requires approval from \_\_\_\_\_. In addition to being used by field staff to coordinate with RIMS, DACHS will also be used by other staff members to expedite the approval process.

For a complete list of the project types that should be initiated in DACHS, refer to the checklist in **Appendix A**.

### What data is required in DACHS?

DACHS requires basic inventory data for each street record. The initial data inputs include:

- Change Type – the type of change that is taking place in the inventory.
- Street – the street name.
- From and To – the streets that will be intersected by the new roadway.
- Length – the length of the new roadway (in feet).
- # Lanes – the total number of lanes that will be included in the roadway.
- Median Type – if the roadway will include a median, the median type should be specified.
- LGB Date - ...

This inventory data will later be used in RIMS to automatically populate some of the inventory fields.

For a complete list of the change types in DACHS, refer to the list on page 10.

## Cardinal Direction

Cardinal directions are the points on a compass: North, South, East and West.

## Prime Direction

In the road inventory, location data is measured either from West to East or North to South. These directions are called the Primary Directions. Having a consistent direction of measurement is important because the LRS is based on how road segments relate to each other. In DACHS, it is not required to enter data in the Primary Direction. In order to enter data in the Primary Direction, select “MP Increase in from/to direction.” This indicates that the mile points are increasing in the Primary Direction. If the data has not been collected in this manner, the user can also select “MP Decrease in from/to direction,” which indicates that the Primary Direction has not been used, rather the opposite is true (mile points decrease along the Primary Direction). While the data can be entered with or without the Primary Direction, once the data has been transferred to RIMS, all road are shown as they are in the road inventory: oriented in the Primary Direction with mile points increasing from East to West and North to South.

## **How does DACHS relate to RIMS?**

What the data inputs have all been completed, click on **Open RIMS ICR**. This will automatically create an Inventory Change Request (ICR) in RIMS. The ICR will automatically be populated with the data from DACHS.

## **What are the steps for entering Inventory in DACHS?**

The following shows the steps initiating an ICR in DACHS using the Springvale Estates scenario.

### **Opening DACHS**



## Register Project

**Step 1** On the Main Menu select New Subdivision Streets, followed by Register Projects. This will open up a “Special Crossing Advisory” which should be read before clicking Continue.

The screenshot shows the DARCHS (Database for Administering Changes to VDOT's Highway Systems) application. The main menu on the left includes options like Main Menu, Residency Office Registration, Print Menu, Data Maintenance, Annexations, CN Projects, Route Re-Numbering, Street Search (ID Maintenance Responsibility), Surety and Fees Management, and New Subdivision Streets (with Register Projects selected). The central panel displays the "Special Crossing Advisory" page, which contains a "Continue" button and a note about requirements for crossing structures or features. The right side of the screen shows sections for Registered Office and Info - Read Me.

**Step 2** Read and review the “Project Registration Guide” before clicking **Continue**.**Project Registration Guide**[Print and Continue](#)[Continue](#)**Assembly Package Development**

DACHS creates a unique Project name to identify all the streets or system changes reported with a project by adding the name of the Subdivision/Project to the Jurisdiction Code of the locality. For subdivision street assemblies, DACHS uses the date of the local governing body's (LGB) Resolution to group streets into multiple addition assemblies for the subdivision.

DO enter ALL streets within a subdivision as soon as a Land Use Permit is issued to connect the subdivision streets to the VDOT maintained network.

DO submit street addition assemblies when the streets are ready for addition when requested by developers.

DO NOT defer acceptance solely on the basis of adding 100% of the streets within a subdivision or a lack of public service.

**Project Naming – Rural Additions and Non-project Abandonments and Discontinuances**

Certain types of recurring projects, like rural additions and abandonments or discontinuances that are not related to projects, may be registered only once in a County.

Using a "generic" naming convention on such projects, such as: "Rural Addition," "County Abandonment," or "Discontinuance" will group all such actions under one "project name" and the resolution date will define the assembly and the route number and/or street name will distinguish the action record.

"Forest Lane (Rte 2345) Abandonment" is also an acceptable form.

**Subdivision Assembly Acceptance Fees**

Acceptance fee amounts are based on the lane miles of new subdivision streets included in a given addition assembly and not the overall subdivision. If a developer elects to bring in streets from adjacent, separately registered projects (Ph 1 and Ph 2) at the same time, streets must be combined into one project, otherwise multiple assemblies will inflate the developer's total fees to an amount greater than if all the streets were combined into one assembly.

When possible, if only one developer is involved use only the root of the subdivision name (such as Cedar Brook rather

**Step 3** Indicate that Fees Apply to This Type Assembly by checking the box for “New Subdivision Street Project” and specify the Rate Schedule is “SSAR.”

It is also optional to enter the email address of local government officials involved with this step of the process. This is done if...

**Indicate if Fees Apply to This Type Assembly**

- Fees DO NOT apply to this assembly, (VDOT Projects, Rural Additions, Access Program Additions, Non-project related abandonments, discontinuances, route re-numberings. Transfers to/from the secondary system.)
- NEW SUBDIVISION STREET PROJECT (One or more streets is subject to a maintenance payment or other fees.)

Rate schedule :       SSR       SSAREmail Addresses of Local Government Officials: 

**Step 4** Choose the Locality Code from the dropdown menu as “029 – County of Fairfax.”

Locality Code

Date of C5 or Loc Gv't Resolution

**CN Project Termini**

Beginning

Ending



Database for Administering Changes to VDOT's Highway Systems



[Home](#) > [Crossing Advisory](#) > [Project Registration Guide](#)

## Step 5 Enter the CN Plan Approval Date as "01/29/2013" for Springvale Estates.

### Initial Developer Fee Schedule

CN Plan Approval Date	Rates Fixed Until	(\$\$)Surety Rate	(\$\$)MP Rate:	(\$\$)Assembly ACR Flat & Variable Rate	(\$\$)Assembly Inspection Flat & variable Rate	
01/29/2013	01/29/2014	3000	0	500	250	125

Surety, MP, Inspection and ACR. Variable rates per 0.10 lane miles

It is optional to enter the date until rates are fixed. This date is automatically entered as being a year from the CN Plan Approval date but can be manually overridden.

Developer fees are fixed for a period of time following the date VDOT approves a developer's construction plan. At the end of that period, prevailing rates apply. See SSR provision 24 VAC 30-91-140 (2005) or SSAR provision 24 VAC 30-92-140 (2009).

**DACHS**  
Database for Administering Changes to VDOT's Highway Systems

VDOT

Home > Crossing Advisory > Project Registration Guide

?

**Step 6** Enter the Project or Subdivision Name as "Springvale Estates." From the dropdown menu, select the Maintenance Area HQ as "\_\_\_\_\_." During this step the Developer and Design Engineer must be selected from the dropdown menus. In this case, select "Example" for each.

Project or Subdivision Name	Use Registration Buttons (right) to Add Firm Not In Lists	
Springvale Estates	Example	Developer
Maintenance Area HQ	Example	Design Engineer
Area 9 - McLean		Road Builder
		Inspector

**Step 7** When all relevant data has been entered, click **Save** then **Start Street Records**.

Project Registration

Start Street Records Print Contact Sheet Save ?

## Add Street Records

**Step 1** Review the data that has been automatically entered in the Inventory Record form. This includes the header (for Springvale Estates “029” “County of Fairfax”) and “Location and Project” (for Springvale Estates “029 Springvale Estates”).

The screenshot shows the DACHS (Database for Administering Changes to VDOT's Highway Systems) software interface. The main window title is "Inventory Record". The left sidebar menu includes "Main Menu", "Residency Office Registration", "Print Menu", "Data Maintenance", "Annexations", "CN Projects, Route, Re-Numbering", "Street Search (ID Maintenance Responsibility)", "Surety and Fees Management", "New Subdivision Streets" (which is expanded to show "Register Projects" and "Add Street Records"), "Land Development Firm Menu" (which is expanded to show "Developer Registration", "Engineer Registration", "Inspector Registration", "Road Builder Registration", and "Firm (Contact) Maint."), and "Data Recall". The "Add Street Records" option under "New Subdivision Streets" is highlighted.

The "Inventory Record" form contains the following fields:

- Location and Project: 029 Springvale Estates
- Type of Change: (dropdown menu)
- Highway System: (dropdown menu)
- Change Description: (dropdown menu)
- Route Prefix: (dropdown menu)      Route No.: 0
- Street Name: (text input)
- Old Route No.: 0      Maint. AreaHQ: (dropdown menu)
- From: (text input)
- To: (text input)
- Mile Posts: (text input)      Increase      Decrease      in From/To Direction
- Mileage Length: 0      Public Service: (text input)
- Type of Pavement: (text input)
- RW Width (ft): (text input)
- LGB Resolution Date: (text input)
- Roadway Inventory Data:
  - Travel Surface Width (ft): W? (dropdown menu)
  - Pavement Width (ft): (dropdown menu)
  - Roadway Shoulder Width (ft): (dropdown menu)
  - Initial No. of Through Lanes: 0
  - Ultimate No. of Through Lanes: 0
  - Planned: (checkbox)
  - Type Facility: (dropdown menu)
  - Pavement Surface Type: (dropdown menu)
  - Pavement Base Type: (dropdown menu)
  - Curb and Gutter: (dropdown menu)
  - Sidewalk: (dropdown menu)
  - Bike-Ped Facility: (dropdown menu)
- Info - Read Me: (button)

**Step 2** Select the Type of Change from the dropdown menu as “Addition.”

Type of Change:

Addition

Changes are different in DACHS and RIMS. For a complete list of change types in DACHS, including diagrams and corresponding RIMS change types, refer to page \_\_\_\_.

**Step 3** Select the Highway System from the dropdown menu as “2- Secondary system.”

Highway System:

2 - Secondary system

**Step 4** Select the Change Description from the dropdown menu as “21 – Addition – New subdivision street.”

Change Description:

21 - Addition - New subdivision street

**Step 5** Type in the Route No. "10461."Route No.: 

This number comes is determined based on the route number reserved in RIMS.

**Step 6** Type in the From and To locations for Springvale Meadow Lane. The From location is "CL Springvale Rd (RTE 674) – 1,915' NE Dogwood Farm Ln (RTE 8188)" and the To location is "1,271' E to Beginning of Temp. Turnaround Easement."

From:   Makes New Entrance  
To:   Makes New Entrance

Note that the From input is mandatory while the To input is not. It is also possible to note that the project Makes a New Entrance, meaning...

**Step 7** Check if the mile posts are traveling in an Increasing or Decreasing Lotion in From/To Direction. For Springvale Estates, check "Increase."

Mile Posts:  Increase  Decrease in From/To Direction

For more information on Increasing and Decreasing mile points, refer to "Directon Matters" on page \_\_\_\_.



Database for Administering Changes to VDOT'S Highway Systems



[Home](#) >[Data Maintenance](#)

**Step 8** Type in the Mileage Length as “0.24.”

Mileage Length:

**Step 9** Type in the resolution date as “01/29/2013.”

Resolution Date:

**Step 10** Enter the Initial No. of Through Lanes as “2” and the Ultimate No. of Through Lanes

Initial No. of Through Lanes:

Ultimate No. of Through Lanes  
Planned:



Database for Administering Changes to VDOT'S Highway Systems



[Home](#) >[Data Maintenance](#)

**Step 11** When the following steps have been completed, click “Next.”

**Inventory Record**

<a href="#">New Entrance Guide</a>	<a href="#">Extend Street</a>	<a href="#">Add New Street</a>	<a href="#">Std. Street Abbreviations</a>	<a href="#">Abandon v Surplus RW</a>
	<a href="#">Save</a>	<a href="#">Open RIMS ICR</a>	<a href="#">Open RIMS PI</a>	

**Step 11** The ICR for Springvale Estates will open in a new window in RIMS. Review the automatically populated fields (Name, type, Status, Created By, Assigned to Division) to ensure that the information has been correctly entered. For Review Required, check “No.” Assign the ICR to a \_\_\_\_\_ by setting the Assigned to dropdown menu as “Test.User1.” Add a text Description of the ICR. When these steps have been completed, click **Save**.

A review of the information in the ICR is only required when...  
Guidance for writing a description for the ICR is provided on page \_\_\_\_.

The screenshot shows the RIMS software interface. At the top, there is a navigation bar with the RNS (Roadway Network System) logo, the word "RIMS", and the VDOT logo. Below the navigation bar, there is a breadcrumb trail: "Home > Springvale Estates". On the left side, there is a sidebar with links for "Search", "Manage", "Reporting", "ICR", and "Support". The main content area displays the following information:

DACHS Assembly: Springvale Estates  
Resolution Date: 1/29/2013  
ICR ID: 10151412  
Jurisdiction: Fairfax, County of

Below this, there is a tabbed navigation bar with "ICR Summary" (selected), "Attachments", "Comments", "Inventory Sections", and "History".

The "ICR Summary" tab displays the following details:

Name: Springvale Estates	Created By: Katherine Lawrence on 7/1/2013
Type: DACHS Assembly	Assigned Division: RIM.FieldEditor on 7/1/2013
Status: Draft	Assigned To: Test.User1
Review Required: <input type="radio"/> Yes <input checked="" type="radio"/> No	UPC Code: [empty input field]

Under the "Description:" label, there is a text area containing the following text:

This is the first of three phases on the Springvale Estates project. One road will be added during this phase. The entire project will add eight new roads and be completed in January 2015.

At the bottom of the page, there are several buttons: "Save" (highlighted in blue), "Process/Forward", "Delete", and "Redline".



FIELD  
STAFF



RIMS

## Create and Review the ICR

Once an ICR has been created in DACHS, it can be accessed in RIMS by clicking the **Open RIMS ICR** button. When this link has been clicked, a window automatically opens in RIMS displaying the ICR. The ICR will already be populated using the inventory data that has been entered in DACHS.

### What components of the CIR are edited in RIMS?

RIMS is used to enter more detailed inventory data for each ICR. While DACHS includes basic information, RIMS is used to coordinate with other departments, including TMPD and Centerline Editors who will have to review the data and make changes to the roadway inventory and official maps. This means that the data inputs should be as detailed and thorough as possible. In addition to inventory data, RIMS allows users to upload attachments and write comments as part of individual ICRs. These are beneficial for sharing additional information across all of the staff that will be responsible for reviewing the ICR.

### How do you write a successful description for the ICR?

When an ICR is opened in RIMS, it is populated with the data entered in DACHS. In the **ICR Summary** tab, enter a detailed description of the change being made and click **Save** when finished. The ICR description should include information relevant to the RIMU editors might need when processing the ICR. This may include, but is not limited to:

- The timing of acceptance,
- The relationship of the road segments in the ICR to existing or future assemblies, or
- Any additional issues to note.

In the case of Springvale Estates, it would be important to note the project completion date, which is \_\_\_\_\_. It would also be beneficial to include that Springvale Meadow Lane is part of a larger development that will be completed over three phases. The user should also note the total number of roads that will be constructed as part of the Springvale Estates project.

### What inventory data is required in RIMS?

Additional data should be input in under the **Inventory Sections** tab. The following shows the steps adding or editing inventory data for an ICR in RIMS, using Springvale Estates as an example.

## Opening RIMS



### PI Detail

A screenshot of the RIMS application interface. At the top, there's a blue header bar with the RIMS logo (RNS Roadway Network System) and the VDOT logo. Below the header is a navigation menu with links for "Search", "Manage", "Reporting", "ICR", and "Support". The main content area shows a breadcrumb trail: "Home &gt; Springvale Estates". The "Springvale Estates" link is highlighted with a yellow arrow.

**Step 1** Click **Inventory Sections** and find the Springvale Meadow Lane Route Segment. Under the Action section, click on the pencil icon to edit the Addition.

A screenshot of the "Inventory Sections" page. The top navigation bar includes tabs for "ICR Summary", "Attachments", "Comments", "Inventory Sections" (which is selected and highlighted in orange), and "History". Below the tabs are buttons for "New Inventory Section", "Check for Redlines", "Validate Selected Items", "Activate Selected Items", and "Refresh". A note at the bottom left says "\*drag and drop the inventory sections to change their order". The main content area displays a table with columns: PI Type, DACHS Type, Location Description, RNS Location, Review Req., RDI, Redlines, and Action. A row for "Route 10461 : SC-10461U RES (Fairfax County)" is shown, with the "Action" column containing a pencil icon.



Search | Manage | Reporting | ICR | Support

Home > Springvale Estates > PI Details

**Step 2** Under “Show Sections,” make sure that “All Sections” has been selected.

PI ID: 10151415 ICR ID: 10151412

Resolution Date: 1/29/2013 Jurisdiction: Fairfax, County of

Show Sections:  All Sections  Required Sections Only

[Save](#) | [Activate](#) | [Validate PI](#) | [Check Redlines](#) | [Delete](#) | [Cancel](#)

[Copy From](#)

[Paste To](#)

The screenshot shows the RIMS (Roadway Network System) interface. At the top, there's a blue header bar with the RNS logo (orange 'R' and 'S' with a road icon), the word 'RIMS', and the VDOT logo (blue 'V' and orange 'DOT'). Below the header is a dark blue navigation bar with links: Search, Manage, Reporting, ICR, and Support. Underneath the navigation bar is a breadcrumb trail: Home > Springvale Estates > PI Details. The 'PI Details' link is highlighted with a yellow arrow-shaped background.

**Step 3** In the Proposed Inventory Information section perform the following tasks:

- a) Review the DACHS change type.
- b) Select the Inventory Change Type from the dropdown menu as “Addition.”
- c) Check “Yes” to indicate that Springvale Meadow Lane Requires Centerline Editing/LRS Build.
- d) Check “No” to indicate that no review is required.

Note that all roads that are not already part of the system require centerline editing and an LRS build.

**Proposed Inventory Information**

DACHS Change Type:	Addition
Inventory Change Type:	<input type="text" value="Addition"/> *
Requires Centerline Editing / LRS Build:	<input checked="" type="radio"/> Yes <input type="radio"/> No *
Review Required:	<input type="radio"/> Yes <input checked="" type="radio"/> No

The screenshot shows the RIMS (Roadway Network System) interface. At the top, there's a blue header bar with the RNS logo (orange 'R' and 'S' with a road icon), the word 'RIMS', and the VDOT logo (blue 'V' and orange 'DOT'). Below the header is a dark blue navigation bar with links: 'Search', 'Manage', 'Reporting', 'ICR', and 'Support'. Underneath the navigation bar is a breadcrumb trail: 'Home' > 'Springvale Estates' > 'PI Details'. The 'PI Details' link is highlighted with a yellow arrow-shaped background.

**Step 4** In the Location Description Section enter the following information:

- a) Enter the Street Name as "Springvale Meadow Lane."
- b) Review the Route Number.
- c) Review the From text to ensure it has been properly copied from DACHS.
- d) Review the To text to sure it has been properly copied from DACHS.
- e) Review the Length (mi) to ensure it has been properly copied from DACHS.

Location Description	
Street Name:	<input type="text" value="pringvale Meadow Lane"/>
Route Number:	10461
From:	<input type="text" value="CL Springvale Rd (RTE 10461)"/>
To:	<input type="text" value="1,271' E to Beginning of"/>
Length (mi.):	<input type="text" value="0.24"/>



RIMS



Search | Manage | Reporting | ICR | Support

Home > Springvale Estates > PI Details

**Step 5** In the RNS Location field review the data for the Route number, From and To locations, and LRM Date to ensure it is accurate. Click the Span Opposite Route to indicate that the route traveling in the opposite direction will contain the same data.

**RNS Location**

**Route:** SC-10461U RES (Fairfax County)  
**From:** Route Offset - 0.000  
**To:** Route Offset - 0.000  
**LRM Date:** 7/1/2013 02:34:01 PM  
 Span Opposite Route

[edit](#)





RIMS



Search | Manage | Reporting | ICR | Support

Home > Springvale Estates > PI Details

**Step 6** In the Miscellaneous Field enter any Comments that might be relevant to the addition.

Comments are typically entered to add additional information to the PI that might help centerline editors properly locate or define the new road segment.

Miscellaneous	Both Directions
Comments:	<div style="border: 1px solid #ccc; height: 100px; width: 100%;"></div>

Last Modified Date: 7/1/2013

Last Modified By: Katherine Lawrence

The screenshot shows the RIMS (Roadway Network System) interface. At the top, there's a blue header bar with the RNS logo (orange 'R' and 'NS' with 'Roadway Network System' text), the RIMS logo ('RIMS'), and the VDOT logo (blue 'V' and 'DOT'). Below the header is a navigation menu with links: Search, Manage, Reporting, ICR, and Support. Underneath the menu, a breadcrumb trail shows the current location: Home > Springvale Estates > PI Details. The 'PI Details' link is highlighted with a yellow arrow-shaped background.

**Step 7** In the Road Configuration section perform the following tasks:

- a) Select the Facility Type from a dropdown menu.
- b) Select the Access Control as “No Access Control” from the dropdown menu.
- c) Select “No” to indicate that the roadway is not part of a Couplet/One-Way Pair.

Road Configuration	Both Directions
Facility Type:	<input type="text"/> *
Access Control:	<input type="text"/> *
Couplet/ One Way Pair?:	<input type="radio"/> Yes <input checked="" type="radio"/> No *



Search | Manage | Reporting | ICR | Support

Home > Springvale Estates > PI Details

**Step 8** In the Travel Lanes/Cross Section check “Copy to other side” to indicate that the inventory data entered is the same traveling in each direction. This will automatically populate the S/W Direction fields, requiring data only be entered in the N/E Direction. Enter the following information about the roadway:

- a) Enter the # of Total Thru Lanes traveling in the N/E Direction.
- b) Enter the Thru Travel Surface Width (ft) in the N/E Direction.
- c) Enter the Total Pavement Width (ft) in the N/E Direction.

Travel Lanes/ Cross Section	N/E Direction	S/W Direction
	<input checked="" type="checkbox"/> Copy to other side.	
# of Total Thru Lanes:	<input type="text" value="1"/> *	<input type="text" value="1"/> *
Thru Travel Surface Width (ft):	<input type="text" value="10"/> *	<input type="text" value="10"/> *
Total Pavement Width (ft):	<input type="text" value="10"/>	<input type="text" value="10"/>



RIMS

Search | Manage | Reporting | ICR | Support

Home > Springvale Estates > PI Details



**Step 9**. In the Roadside Section check “Copy to other side” to indicate that the inventory data entered is the same traveling in each direction. This will automatically populate the Left/Inside Relative to the Prime Directions (N/E) fields, requiring data only be entered in the Right/Outside Relative to the Prime Directions (N/E). Review the following fields:

- a) The Shoulder Type is not applicable for the project.
- b) Enter “7” for the Paved Shoulder Width (ft) on the Right/Outside Relative to the Prime Direction (N/E).
- c) The Unpaved Shoulder Width (ft) is not applicable for the project.
- d) The Curb Type is not applicable for the project.

Roadside	Right/Outside Relative to Prime Direction (N/E)	Left/Inside Relative to Prime Direction (N/E)
	<input checked="" type="checkbox"/> Copy to other side.	
Shoulder Type:	<input type="text"/>	<input type="text"/>
Paved Shoulder Width (ft):	7	7
Unpaved Shoulder Width (ft):	<input type="text"/>	<input type="text"/>
Curb Type:	<input type="text"/>	<input type="text"/>

**Step 10** In the Median section, leave all fields blank. For Springvale Meadow Road, the Median data is not applicable. Review the Median Type field, which has been automatically populated with data from DACHS, to ensure that the value is “1- None (1).”

**Median***Section only editable when the Facility type is 'Divided'*

Median Type:	<input type="text" value="1-None (1)"/> *
Median Width-Minimum (ft):	<input type="text"/>
Median Width-Predominant (ft):	<input type="text"/>
Median Percent Coverage:	<input type="text"/>

**Step 11** In the Median Shoulders and Curbs section, leave all fields blank. This section data is not applicable to Springvale Meadow Lane.

Median Shoulders and Curbs	Median Right Relative to Prime Direction (N/E)	Median Left Relative to Prime Direction (N/E)
<input checked="" type="checkbox"/> Copy to other side.		
Median Shoulder Type:	<input type="text"/>	<input type="text"/>
Median Shoulder-Paved Width (ft):	<input type="text"/>	<input type="text"/>
Median Shoulder-Unpaved Width (ft):	<input type="text"/>	<input type="text"/>
Median Curb Type:	<input type="text"/>	<input type="text"/>

**Step 12** In the Pavement section, select “05-Conventional Plan Mix Asphalt (6,7)” from the dropdown menu to define the Surface Type. For the Base Type, select “12- Selected Materials (2)” from the dropdown menu.

A full definition for Surface Type and Base Type, as well as a complete list of inputs for this value, can be found in Appendix A.

Pavement	Both Directions
Surface Type:	<input type="text"/> 05-Conventional Plant Mix Asphalt (6,7) *
Base Type:	<input type="text"/> 12-Selected Materials (2) *

**Step 13** For the Pavement Materials section, leave all fields blank. The Pavement Material and Thickness (in) are not applicable to Springvale Estates.

The Pavement Material and Thickness (in) fields are optional and should be used for...

Pavement Materials	Both Directions				
Pavement Material:	--Select One--				
Thickness (in):	<input type="text"/>				
<a href="#">Add Pavement Type</a>					
<i>Drag and drop pavement material types to change their order. (9 maximum)</i>					
Surface	<table border="1"><thead><tr><th>Material</th><th>Thickness</th></tr></thead><tbody><tr><td></td><td></td></tr></tbody></table>	Material	Thickness		
Material	Thickness				
Base					

The screenshot shows the RIMS (Roadway Network System) interface. At the top, there's a blue header bar with the RIMS logo and the VDOT logo. Below the header is a navigation bar with links for Search, Manage, Reporting, ICR, and Support. Underneath the navigation bar is a breadcrumb trail: Home > Springvale Estates > PI Details. The 'PI Details' link is highlighted with a yellow arrow-shaped background.

**Step 14** For the Bicycle/Shared Access section, specify the Bicycle Access Type as “0 – No Bike Path” using the dropdown menu. For Side of the Road, choose “1 – None.” Additional data about the bicycle path, including the Paved, Bicycle Route, and Owner fields are not applicable.

Bicycle / Shared Access	
Both Directions	
Bicycle Access Type:	<input type="text" value="0-No Bike Path"/> *
Paved:	<input type="text" value="No"/> *
Bicycle Route:	<input type="text"/>
Owner:	<input type="text"/> (for example, VDOT or Local)
Side Of Road:	<input type="text" value="1-None"/> *

**Step 15** In the Sidewalks section, use the dropdown menu to specify the Side of the Road as “1 – None.”

Sidewalks	
Both Directions	
Side Of Road:	<input type="text" value="1-None"/> *

**Step 16** In the Right of Way section check “Copy to other side” to indicate that the inventory data entered is the same traveling in each direction. This will automatically populate the Left/Inside Relative to the Prime Directions (N/E) fields, requiring data only be entered in the Right/Outside Relative to the Prime Directions (N/E). For the Min Width (ft) type “10” and for the Max Width (ft) type “10.”

Right of Way	Right/Outside Relative to Prime Direction (N/E)	Left/Inside Relative to Prime Direction (N/E)
	<input checked="" type="checkbox"/> Copy to other side.	
Min Width (ft):	<input type="text" value="10"/> *	<input type="text" value="10"/> *
Max Width (ft):	<input type="text" value="10"/> *	<input type="text" value="10"/> *

The screenshot shows the RIMS (Roadway Network System) web application. At the top, there's a blue header bar with the RIMS logo on the left and the VDOT logo on the right. Below the header is a dark blue navigation bar with links for Search, Manage, Reporting, ICR, and Support. Underneath the navigation bar is a breadcrumb trail: Home > Springvale Estates > PI Details. The 'PI Details' link is highlighted with a yellow arrow-shaped background.

**Step 17** For the Administrative section, perform the following tasks:

- a) Set the Functional Class to “7 – Local (J,6)” using the dropdown menu.
- b) Set the Maintenance Jurisdiction to “Fairfax, County of” using the dropdown menu.
- c) Set the Physical Jurisdiction to “Fairfax, County of” using the dropdown menu.
- d) Set the Operating Region to “Northern” using the dropdown menu.
- e) Set the National Highway System to “0 – Not Part of the NHS” using the dropdown menu.

Administrative	Both Directions
Functional Class:	7-Local (J,6) <input type="button" value="▼"/> <input type="button" value="*"/>
Maintenance Jurisdiction:	Fairfax, County of <input type="button" value="▼"/> <input type="button" value="*"/>
Physical Jurisdiction:	Fairfax, County of <input type="button" value="▼"/> <input type="button" value="*"/>
Operation Region:	Northern <input type="button" value="▼"/> <input type="button" value="*"/>
National Highway System:	0 -Not Part of NHS <input type="button" value="▼"/> <input type="button" value="*"/>

The screenshot shows the RIMS (Roadway Network System) web application. At the top, there's a blue header bar with the RIMS logo on the left and the VDOT logo on the right. Below the header is a navigation menu with links for Search, Manage, Reporting, ICR, and Support. Underneath the menu, a breadcrumb trail shows the user has navigated from Home to Springvale Estates, and the current page is PI Details, which is highlighted with a yellow arrow-shaped background.

**Step 18** In the Responsibility section, specify the following fields:

- Set the Location Type to “4-City or Town Pop. 3,500-4,999 (B,4)” using the dropdown menu.
- Set the Ownership Category to “02 – County Hwy Agency (3)” using the dropdown menu.
- Set the Public Road categorization to “Yes” using the dropdown menu.

Responsibility	Both Directions
Location Type:	<input type="text" value="4-City or Town Pop. 3,500 - 4,999 (B,4)"/> *
Ownership Category:	<input type="text" value="02-County Hwy Agency (3)"/> *
Public Road:	<input type="text" value="Yes"/>

**Step 19** In the Urban Areas section, specify the Urban Area Code as \_\_\_\_\_.

Urban Areas	Both Directions
Urban Area Code:	<input type="text"/> *

**Step 20** In the Auxiliary Lane Section, specify the Type as \_\_\_\_\_ using the dropdown menu. For the Number of Lanes, type \_\_\_\_\_. The remaining fields, including Side of Road, Lane Width (ft), Lane Length, Lane Length Units, Taper Length, and Taper Length Units are not applicable to Springvale Meadow Lane.

Auxiliary Lane	Both Directions
Type:	<input type="text"/> *
Side Of Road:	<input type="text"/>
Lane Width (ft):	<input type="text"/>
Lane Length:	<input type="text"/>
Lane Length Units:	<input type="text"/>
Taper Length:	<input type="text"/>
Taper Length Units:	<input type="text"/>
Number of Lanes:	<input type="text"/> *

**Step 21** In the Snow Maps section, leave all fields blank. This section is not applicable to Springvale Meadow Lane.

Snow Maps	Both Directions
Snow Map:	<input type="text"/>   
Treatment Type:	<input type="text"/>  *
Locality Name:	<input type="text"/> *
Street Name:	<input type="text"/> *
Street Type:	<input type="text"/> *
Address Range(Low):	<input type="text"/>
Address Range(High):	<input type="text"/>
Zipcode:	<input type="text"/>

**Step 21** Review the form to ensure that all of the data has been properly entered. Check that all required fields, which are marked with a red asterisk, have been properly completed. When this is finished, click **Save**.

[Save](#) | [Activate](#) | [Validate PI](#) | [Check Redlines](#) | [Delete](#) | [Cancel](#)

## How do you upload an attachment?

Attachments are used in RIMS to provide additional information about the road segment that might not be addressed in the **Inventory Sections** tab. This typically includes mapping information that is best shown as a sketch or detailed plan. Additional documents might include information on:

- The project assembly or timeline,
- Construction details, or
- Official documents regarding future road maintenance.

For Springvale Meadow Lane, the ICR will include a sketch that shows where the new road segment will be located compared to existing road segments. The sketch is shown on page 21.

For a list of elements that should be included in a successful sketch diagram, refer to the checklist in [Appendix A](#).

The following shows the steps for adding an attachment to an ICR in RIMS using the Springvale Estates scenario.

## Adding an Attachment

The screenshot shows the RIMS software interface. At the top, there is a dark blue header bar with the text "Welcome COV\Katherine.Lawrence". Below this is a light blue navigation bar containing the RNS logo (Roadway Network System), the RIMS logo, and menu items: Search, Manage, Reporting, ICR, and Support. A yellow arrow points to the "Springvale Estates" link in the breadcrumb trail, which is located below the navigation bar.

**Step 1** In the ICR, navigate to the **Attachments** tab. Click **Add an Attachment**.

The screenshot shows the "Attachments" tab of the ICR interface. At the top, it displays the assembly name "DACHS Assembly: Springvale Estates", the resolution date "1/29/2013", the ICR ID "10151412", and the jurisdiction "Fairfax, County of". Below this is a table with columns: Attachment, Description, Size, Created Date, Create By, and Actions. A button labeled "Add an Attachment" is located above the table. The message "There are no attachments to view" is displayed in the center of the table area. At the bottom, there is a pagination control showing "Page 1 of 0" and a dropdown for "25".

Welcome COV\Katherine.Lawrence

**RNS** | RIMS

Search | Manage | Reporting | ICR | Support

Home > Springvale Estates



**Step 2** When the **Upload Attachment** menu appears, Choose a file by clicking **Browse...**

Springvale Estates

**Upload Attachment**

Choose a file:

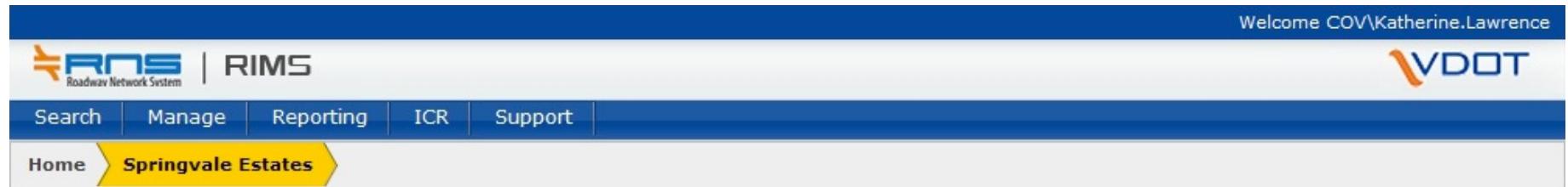
Description:

Welcome COV\Katherine.Lawrence

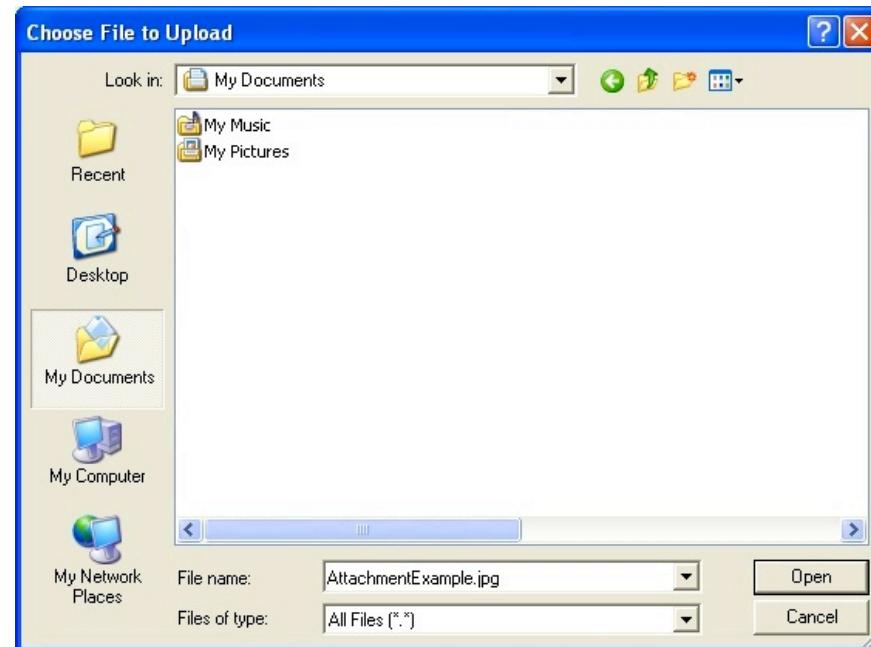
RNS | RIMS

Search | Manage | Reporting | ICR | Support

Home > Springvale Estates



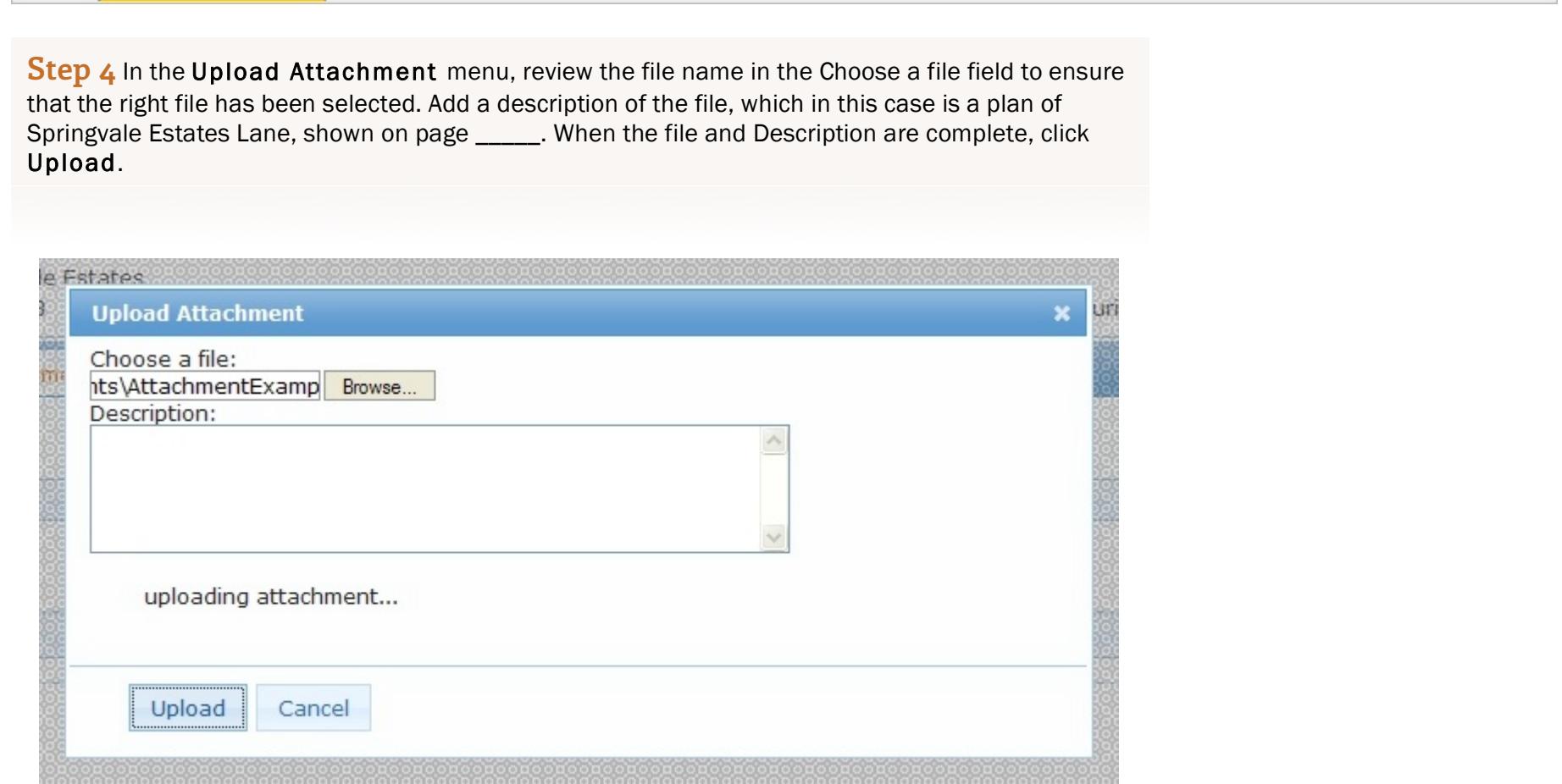
**Step 3** When the **Choose File to Upload** menu appears, navigate to the file that should be uploaded. Keep in mind that only \_\_\_\_\_ files can be uploaded to RIMS. When the appropriate file has been located, click **Open**.



RNS | RIMS

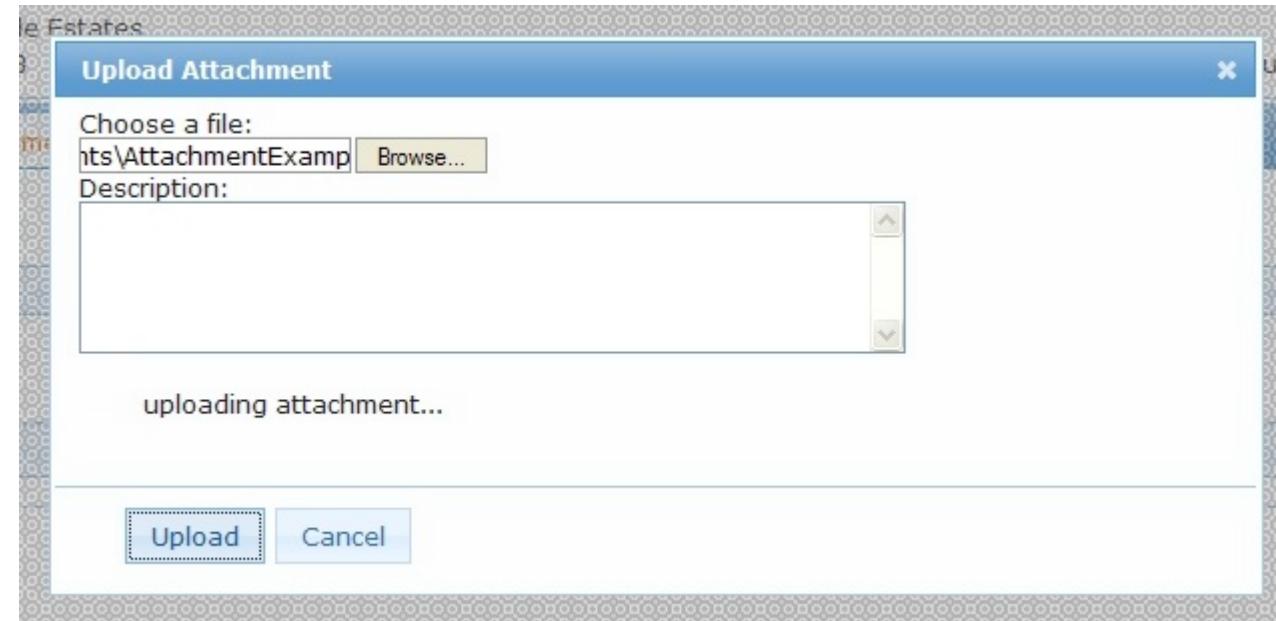
Search | Manage | Reporting | ICR | Support

Home > Springvale Estates



The screenshot shows a web browser window with the RNS|RIMS logo at the top left. To the right of the logo is the VDOT logo. A blue navigation bar spans the top with links for Search, Manage, Reporting, ICR, and Support. Below the navigation bar, a breadcrumb trail indicates the user is on the 'Springvale Estates' page. The main content area contains a step-by-step guide for uploading attachments. Step 4 is highlighted in orange and describes reviewing the file name and adding a description before clicking 'Upload'. Below this, a modal dialog titled 'Upload Attachment' is displayed. It has fields for 'Choose a file:' (containing 'nts\AttachmentExample') and 'Description:' (an empty text area). A progress bar below the description field shows 'uploading attachment...'. At the bottom of the modal are 'Upload' and 'Cancel' buttons.

**Step 4** In the **Upload Attachment** menu, review the file name in the Choose a file field to ensure that the right file has been selected. Add a description of the file, which in this case is a plan of Springvale Estates Lane, shown on page \_\_\_\_\_. When the file and Description are complete, click **Upload**.



Welcome COV\Katherine.Lawrence

RNS | RIMS

Search | Manage | Reporting | ICR | Support

Home > Springvale Estates

## Step 5

For more on Attachments, including editing and deleting attachments, refer to the [User Manual](#) page \_\_\_\_.

### What if there are no sketches of the project available?

If there are no drawings or plans of the new roadway, it is possible to add a Redline sketch of the project within RIMS using the Redline tool.

For an example of a project that used the Redline tool to create a sketch, refer to the Discontinuance example on page 52.



RIMU  
STAFF

RIMS

## Check Data and Make Reserved Routes Active

Before an ICR can be activated, the data should be reviewed to ensure that it is accurate. Once this process is completed, it will be possible to make the route active.

### What data must be reviewed before making the route active?

Once the ICR has been located, it is important to review the data. The required fields include:

#### How can I find an old ICR?

To review the route data the user must first identify the proper route in RIMS. This is done using the “ICR Search” function, located in the “ICR” menu. There are two methods for locating an ICR. The first is to use the Pre-set Filters, which allows the user to find ICRs that are:

- Created by Me;
- Assigned to Me; or
- Assigned to My Group.

If it is not possible to find the ICR using the Pre-set Filters, use the Advanced Search option. The screen, displayed below, provides a number of search methods for locating an ICR. Each of the fields used for the Advanced Search is also described below.

## Adding an Attachment

The screenshot shows the RIMS (Roadway Network System) web application. At the top, there's a dark blue header bar with the text "Welcome COV\Katherine.Lawrence". Below the header is a light blue navigation bar with the RIMS logo on the left and the VDOT logo on the right. The navigation bar includes links for "Search", "Manage", "Reporting", "ICR", and "Support". Below the navigation bar, a breadcrumb trail shows "Home > Springvale Estates".

**Step 1** Review the information in the ICR to ensure that it is completed and accurate. On the **ICR Summary** tab, click **Process/Forward**.

DACS Assembly: Springvale Estates  
Resolution Date: 1/29/2013

ICR ID: 10151412  
Jurisdiction: Fairfax, County of

ICR Summary	Attachments	Comments	Inventory Sections	History
Name: Springvale Estates Type: DACS Assembly Status: Draft Review Required: <input type="radio"/> Yes <input checked="" type="radio"/> No	Created By: Katherine Lawrence on 7/1/2013 Assigned Division: RIM.FieldEditor on 7/1/2013 Assigned To: Test.User1	UPC Code: <input type="text"/>	Description: This is the first of three phases on the Springvale Estates project. One road will be added during this phase. The entire project will add eight new roads and be completed in January 2015.	

[Save](#) | [Process/Forward](#) | [Delete](#) | [Redline](#)

W

**Step 2** When the **Process/Forward** form appears, select “Submit for Review and Processing” as the Action. In the Comments section add any additional information that may be helpful to the RIMU Editors. When the form has been completed, click **Submit**.

Springvale Estates

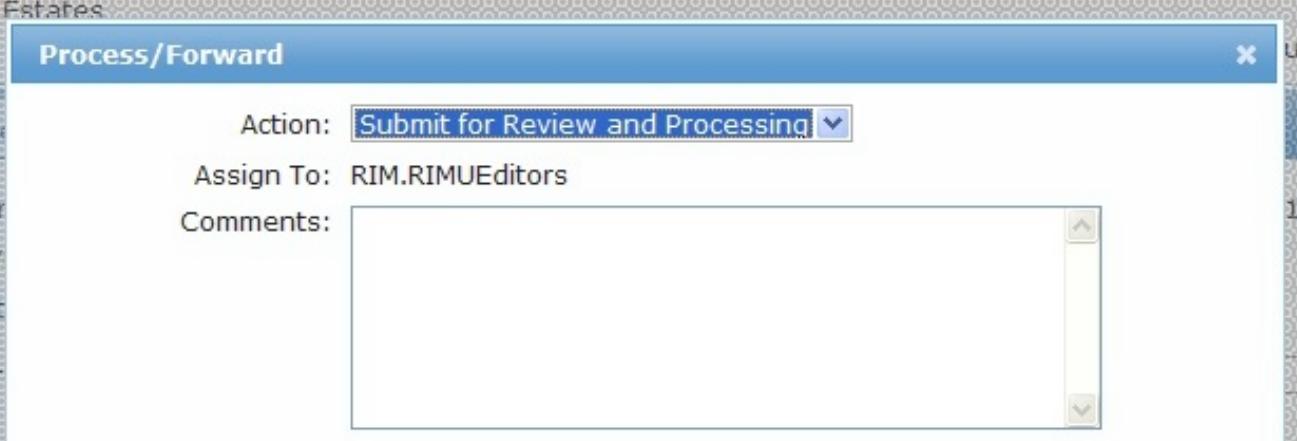
**Process/Forward**

Action:

Assign To: RIM.RIMUEditors

Comments:

Submit Cancel



When the route is active...



**GIS  
STAFF**



**ITD  
STAFF**



**GIS**

## [5] Update Map and Network

**Note: This step is not completed by Field Staff.**

When an ICR is active, it is submitted to the Centerline Editors. During this phase, the Centerline Editors perform a series of tasks including splitting edges to create new intersections, create centerline geometry, assign measures and routes to edges, and adjust any other data as required by the project. When the LRS has been completed, the RNS team will review the data and the centerline edits. When both the Centerline Editors and RNS team have ensured the accuracy of the data, the ICR status is changed back to “Review.”



**RIMU  
STAFF**



**RIMS**

## [6] TMPD Data Verification

**Note: This step is not completed by Field Staff.**

TMPD is the “data owner” for functional class, National Highway System designation, Urban Area, and Bicycle/Shared Access data. Therefore they must review these items before an ICR can be completed. When the data has been checked and verified, the ICR is sent back to RIMU with a comment to note that the review has been completed.



**RIMU  
STAFF**



**RIMS**

## [7] Finalize and Close Out the ICR