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Strategic Local Government Asset Assessment Project

Nominating Assets for SLGAAP in the NHVR Portal Asset Capability tab

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nhvr.engagementhub.com.au

Asset Data Checklist to Nominate for SLGAAP

Mandatory Asset Details

- ❑ Road Manager name
- ❑ Asset name
- ❑ Asset type
- ❑ Road Manager Asset ID

Optional Asset Details

- ❑ Road name
- ❑ Primary material*
- ❑ Design Standard*
- ❑ Construction year
- ❑ Overall length
- ❑ Overall width
- ❑ Have design drawings (yes/no)
- ❑ Last inspection date*

Span Details

- ❑ Span lengths

Spatial Details

- ❑ Asset location*

Attachments

- ❑ A valid Level 2 inspection report (see FAQs for more information)

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*Refer next slide

Asset Data Checklist to Nominate for SLGAAP

Asset Details

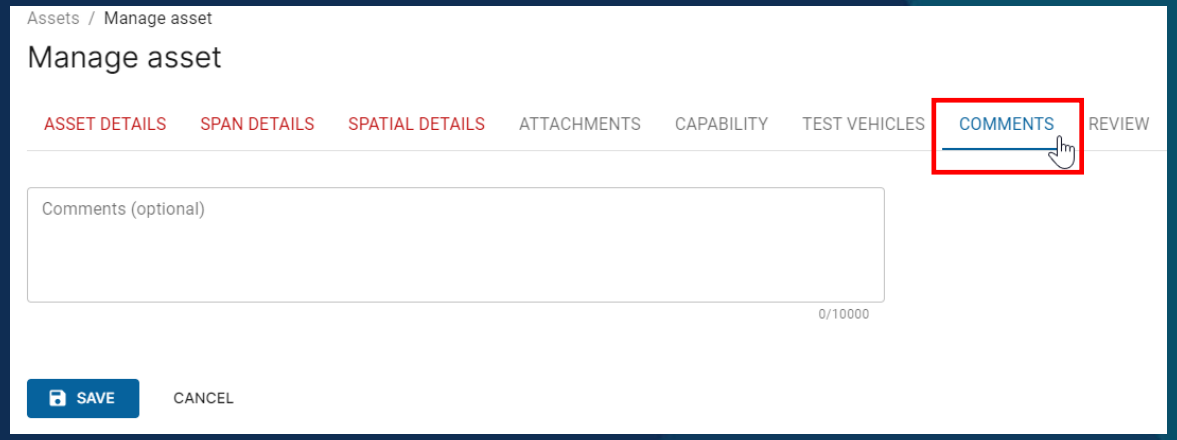
❑ Primary material*
Please choose closest resemblance to the asset and add comment for any additional materials

❑ Design Standard*
Please choose closest resemblance to the asset and add comment if unknown/additional standards

❑ Last inspection date*
If unknown, please enter current date and add comment that inspection has not been completed

Spatial Details

❑ Asset location*
See step 6 for more information on adding location



SLGAAP Asset Selection Criteria

Proposed selection & prioritisation criteria	Description
Freight & Land Use Connectivity	Linking freight-dependent land uses (e.g. ports, mines, bulk handling facilities, grain receival terminals, industrial estates, rail heads or intermodal, saleyards, feedlots, agricultural, depots or airfields etc.)
Regional Network Access	Linking towns or cities across Council boundaries or connecting to higher order freight networks including State or National Network corridors
Heavy Vehicle Demand or Traffic Composition	Carrying moderate traffic volumes or heavy vehicle percentages, and located on identified networks or receiving moderate volumes of permit applications
Functional Classification or Road Hierarchy	Higher order (primary or secondary) roads with a trunk infrastructure classification (e.g. arterial or sub-arterial, district or regional classification)
Lifeline Function	Providing a single point of access to communities, lacking reasonably viable alternative routes or roads providing a relief route function during planned or unplanned incidents
Strategic Alignment	Aligns to broader government or industry strategies for land use planning, asset management or economic development or identified in freight-specific investment programmes

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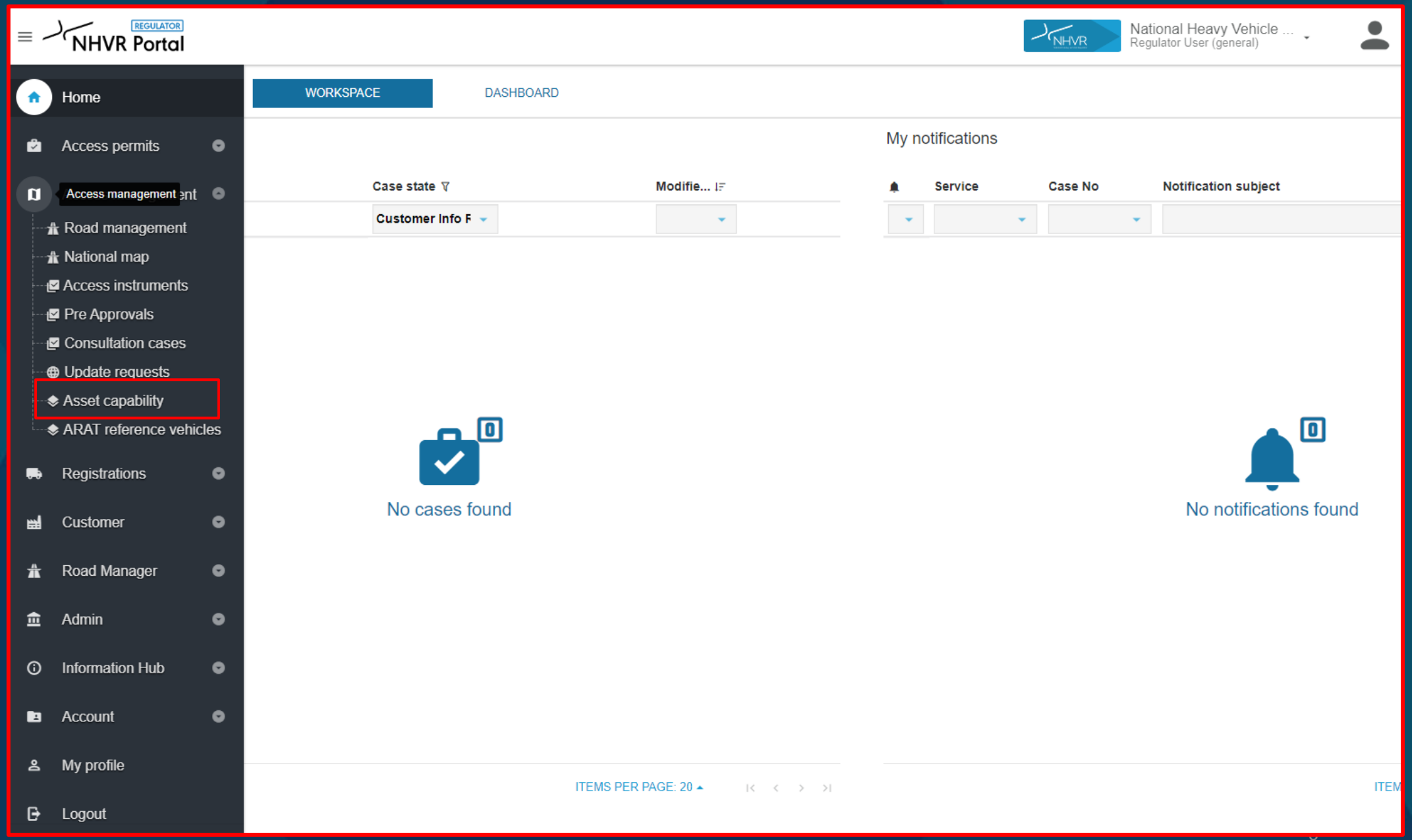
Step-by-step guide

Step 1: Go to the Asset Capability Module in NHVR Portal

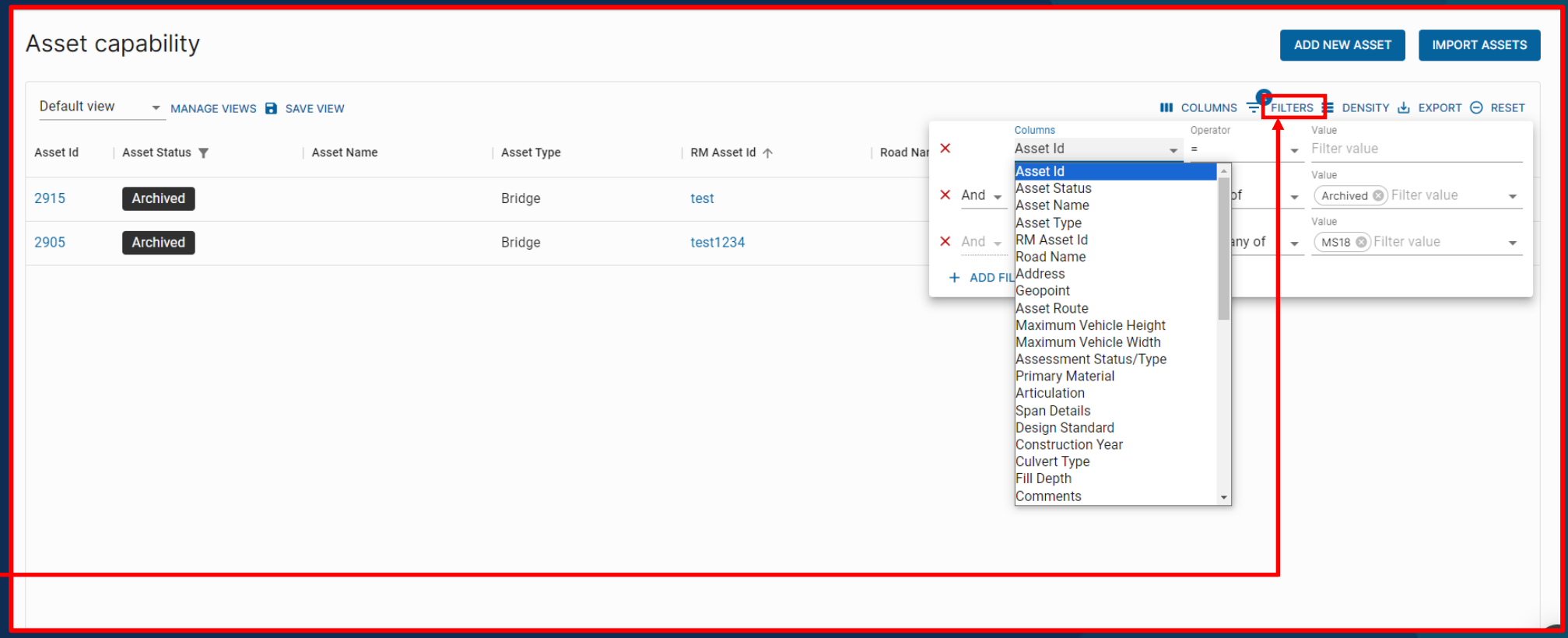


Step 2: Check if assets are already loaded within your LGA

- Is the asset already loaded within your Local Government Area account?

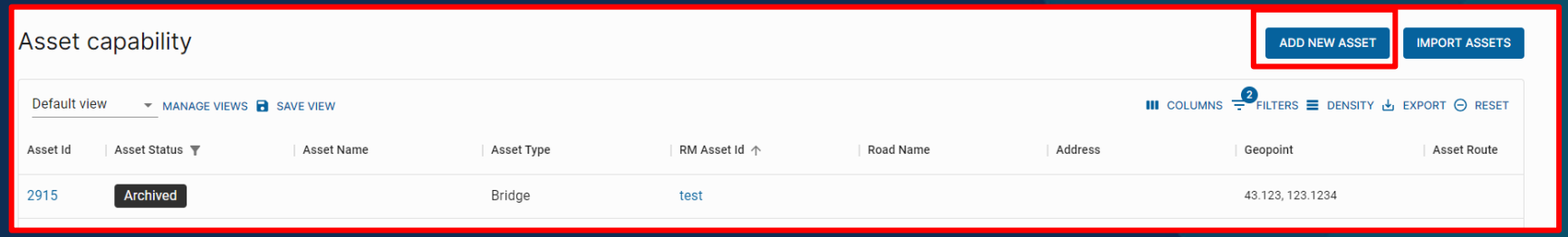
If **yes**, go to step 5
If **no**, go to step 3

Use filters to search for asset if required



Do you want to bulk upload your asset data?
If **yes**, go to 'Slide 14 – Bulk Upload Assets'
If **no**, go to step 3 below

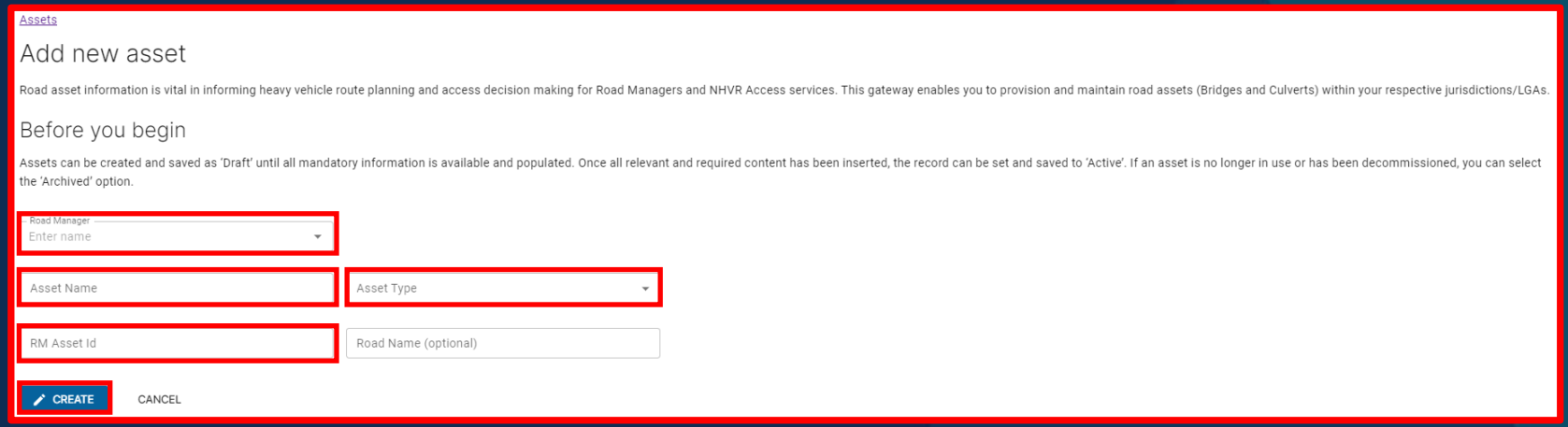
Step 3: Click add new asset



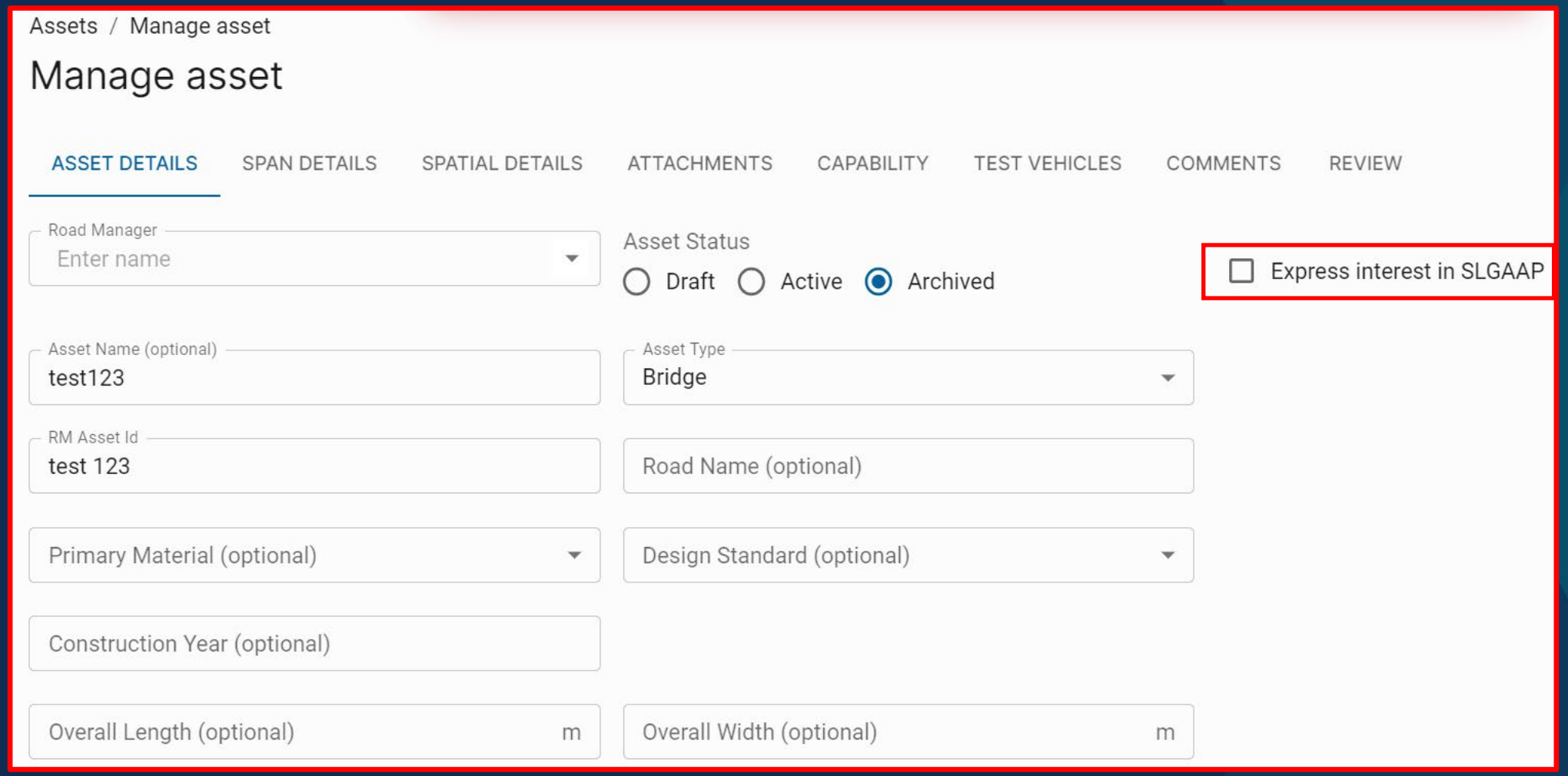
Step 4: Enter all required data fields within the New Asset Gateway and click create

Required fields to create asset:

- ❑ Road manager name
- ❑ Asset name
- ❑ Asset Type (bridge/culvert)
- ❑ RM Asset ID

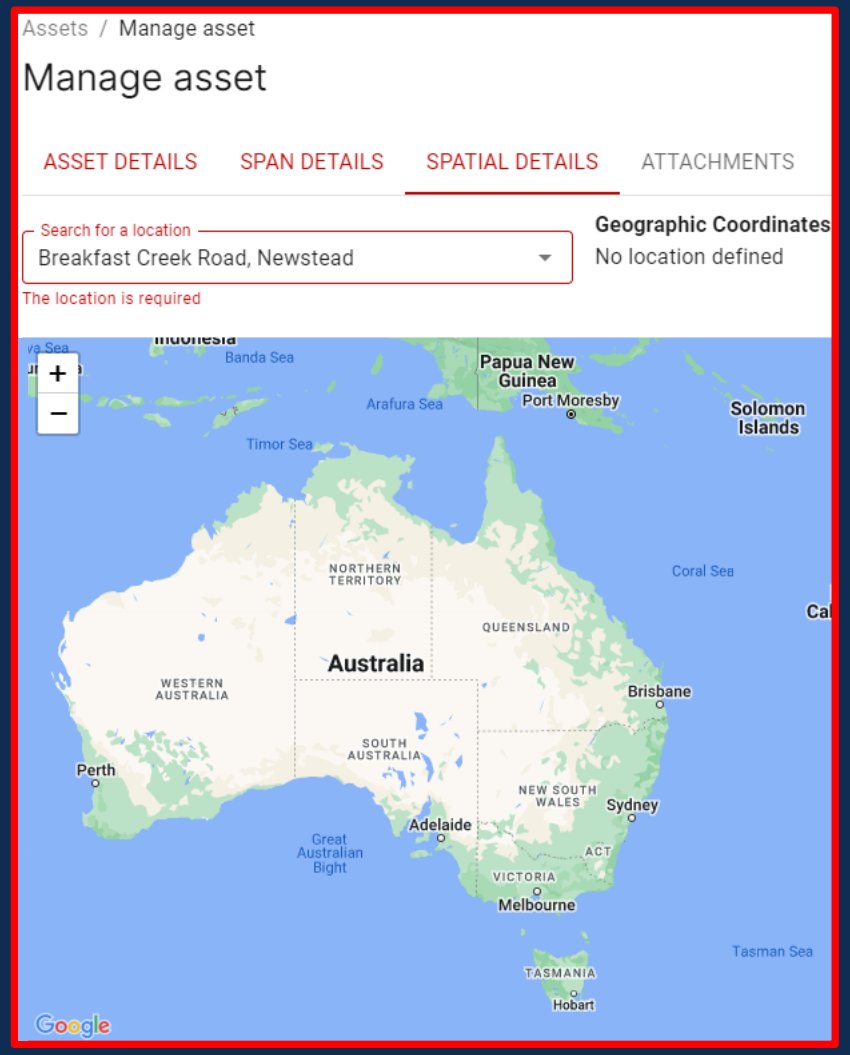


Step 5: Tick the ‘Express interest in SLGAAP’ button

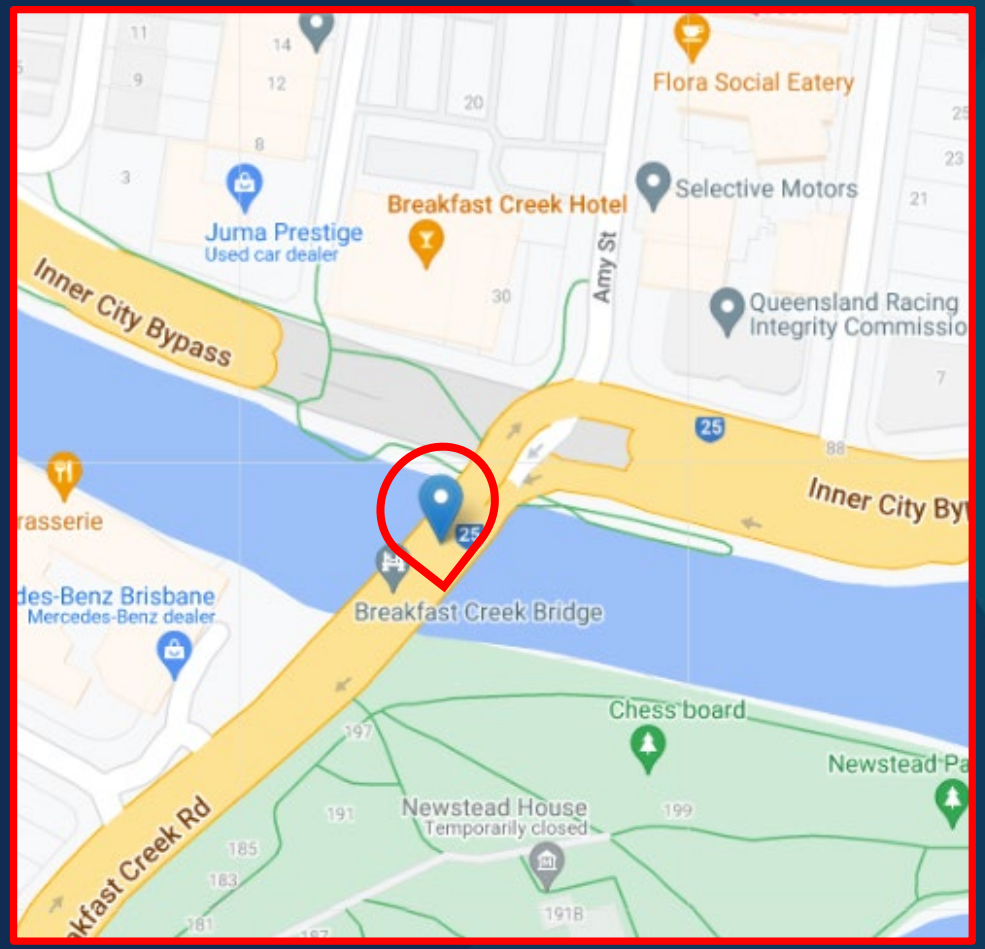


Step 6: Adding Spatial details - Option 1

1. Enter Road name into ‘Search for a location’ bar



2. Manoeuvre blue pin drop to asset location

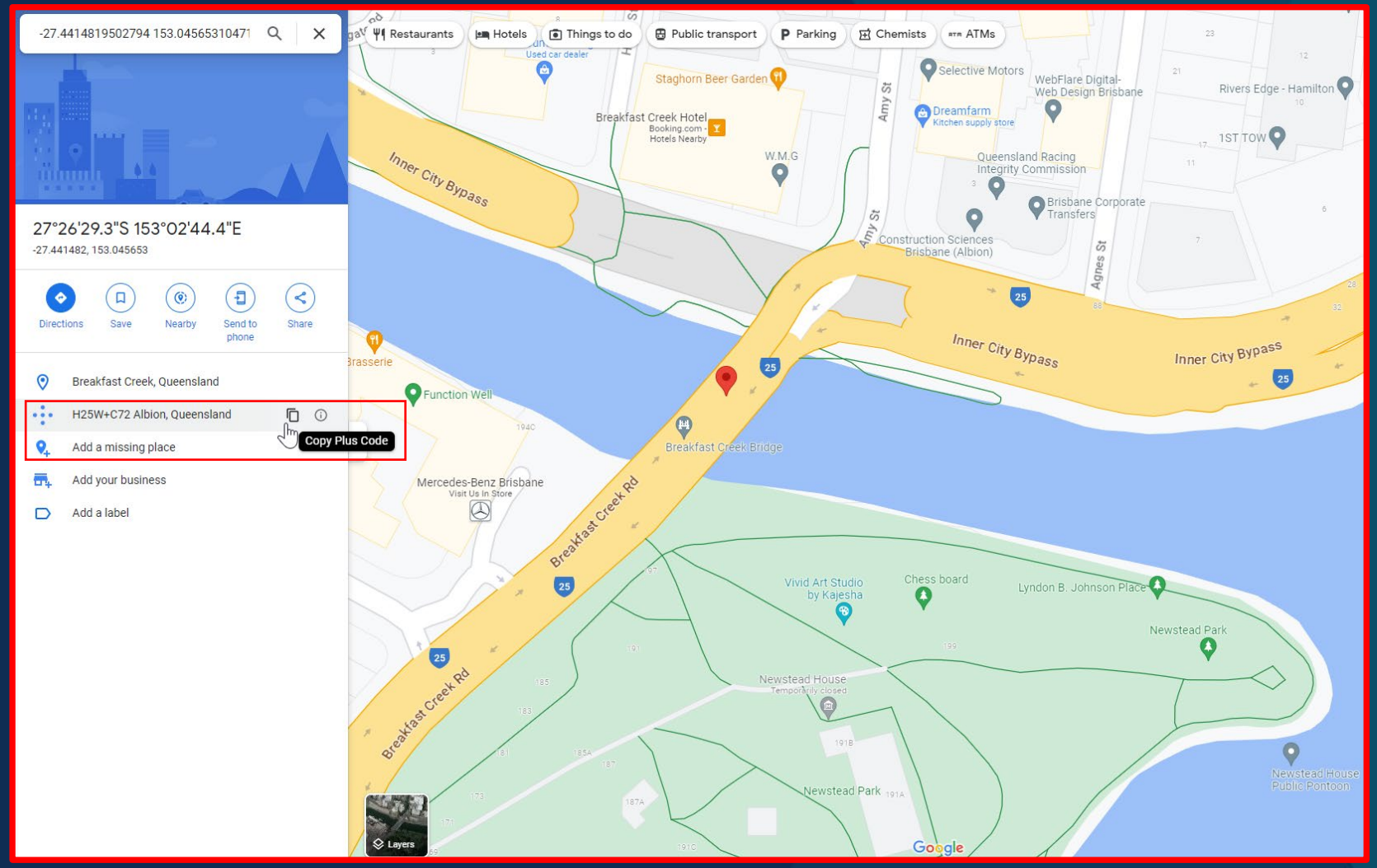


Step 6: Adding Spatial details - Option 2

1. Visit google maps on your browser

2. Paste lat/long coordinates into search bar
(eg. -27.441 153.0456)

3. Copy ‘Plus Code’

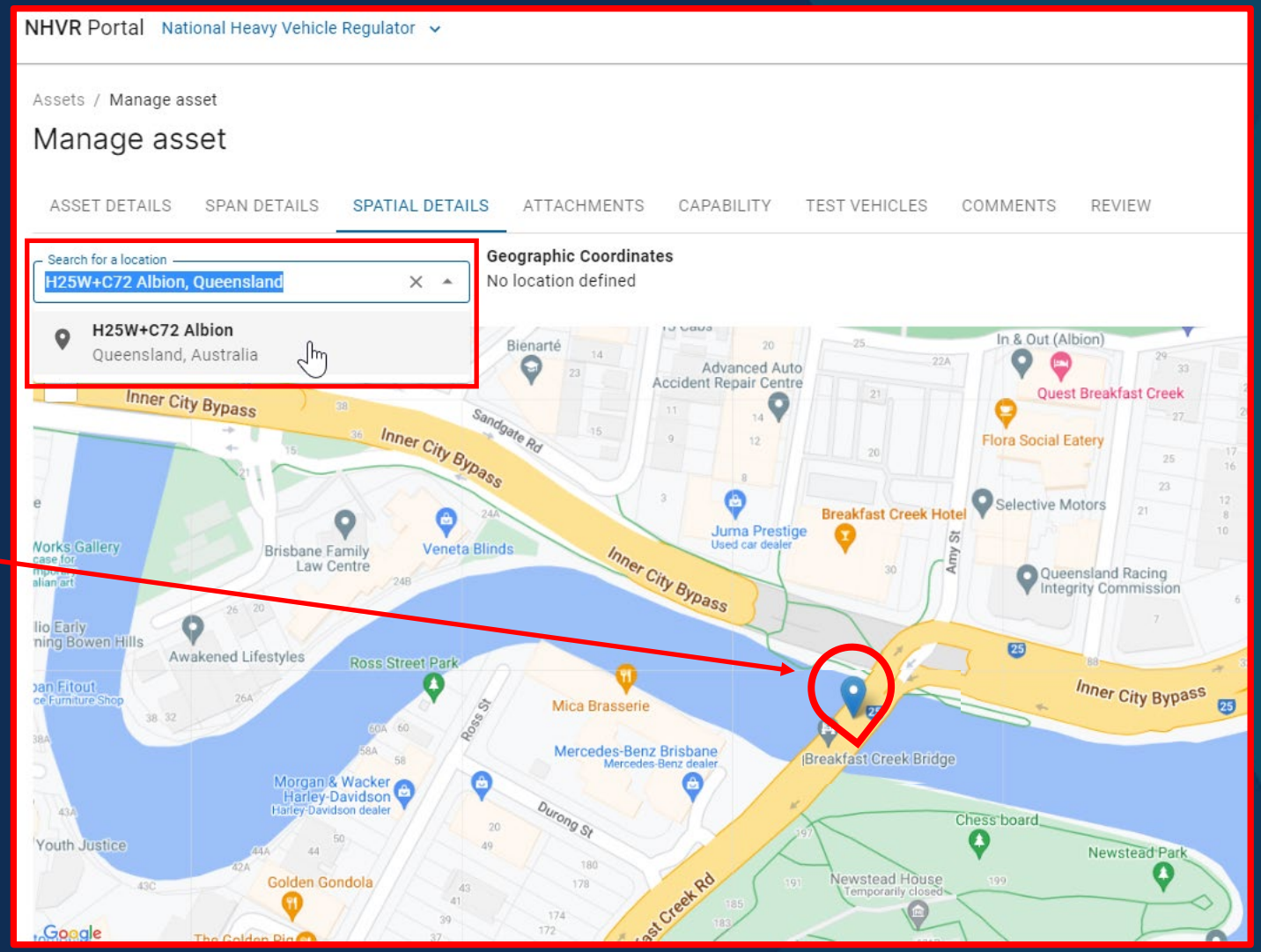


Step 6: Adding Spatial details - Option 2

4. Navigate to Asset Module Spatial Details

5. Paste ‘Plus Code’ into ‘Search for a location’ bar

6. Manoeuvre blue pin drop to asset location as needed

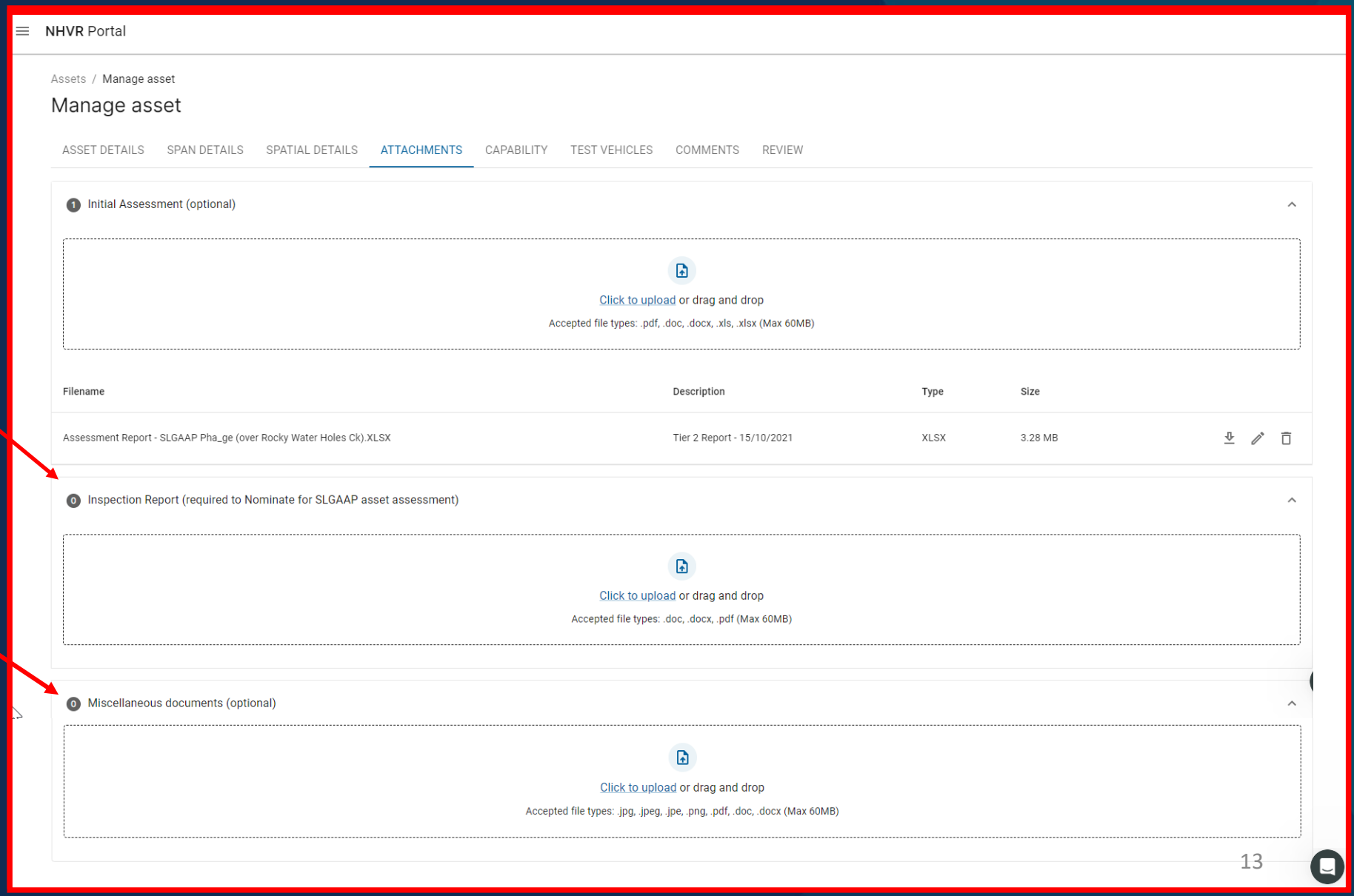


Step 7: Adding Inspection Report Attachments

Add level 2 inspection report to appropriate field via ‘click to upload’ or drag and drop

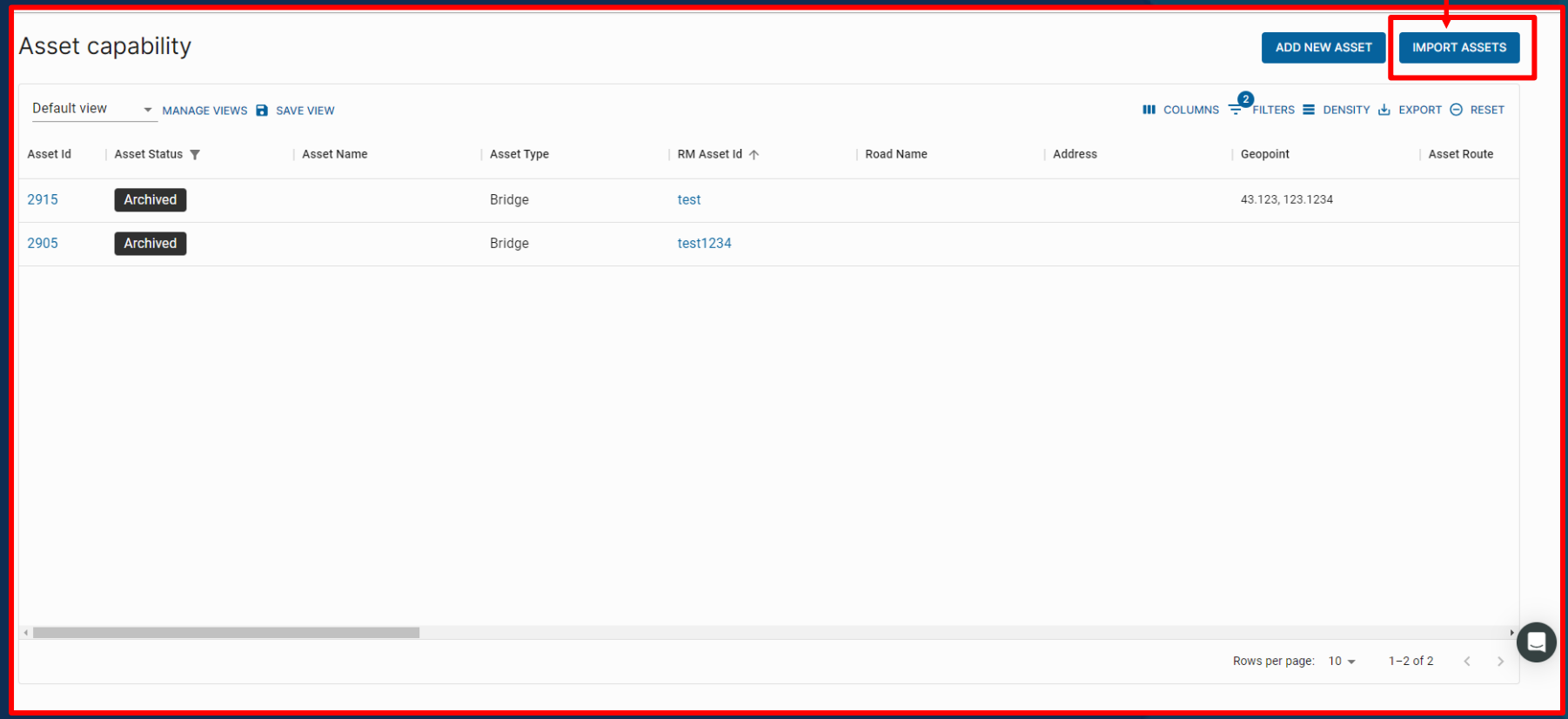
NOTE:
Please include other attachments in Miscellaneous documents if available:

- Design/construction drawings
- Asset photos



Bulk Upload Assets

Click ‘Import Assets’ to open data import tool

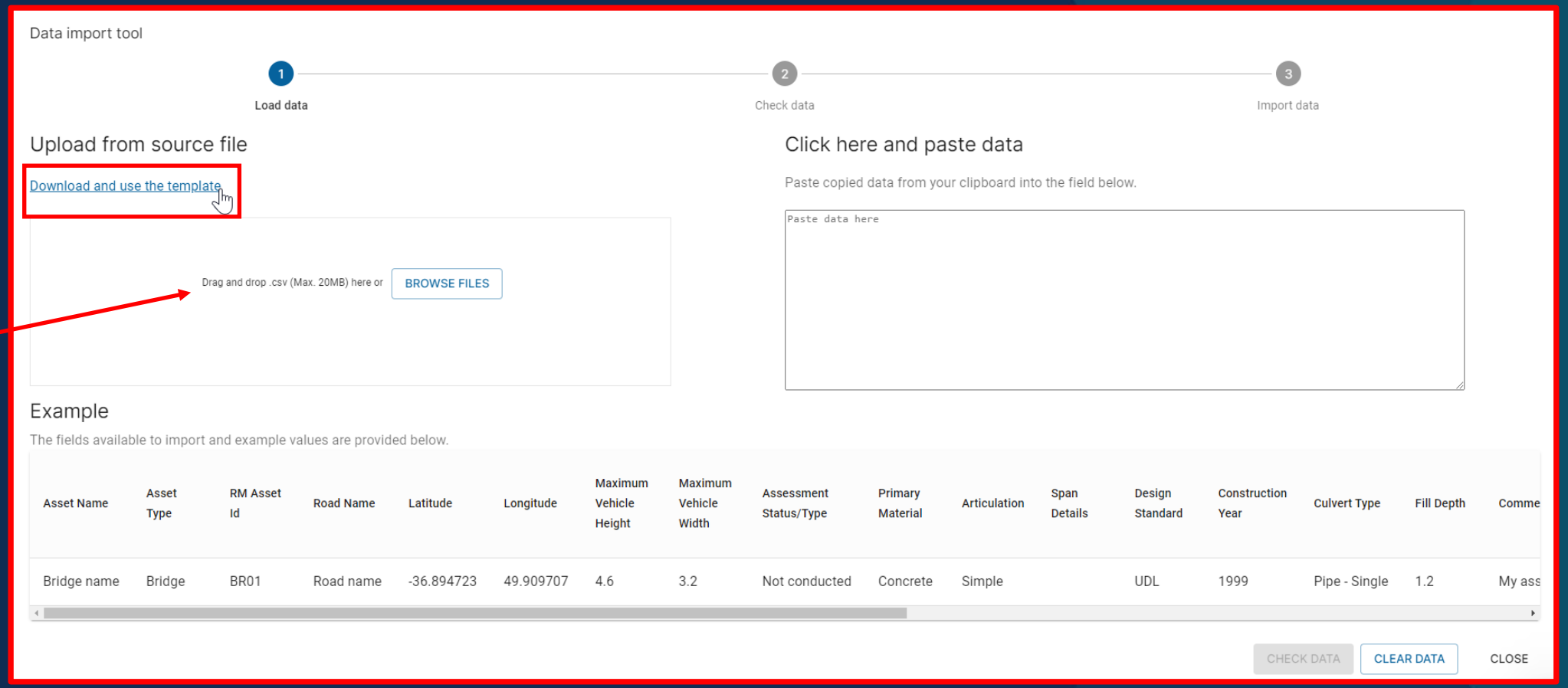


Bulk Upload

1. Download and complete the asset template

2. Upload completed template to data import tool

NOTE:
This section provides data examples/formats to follow

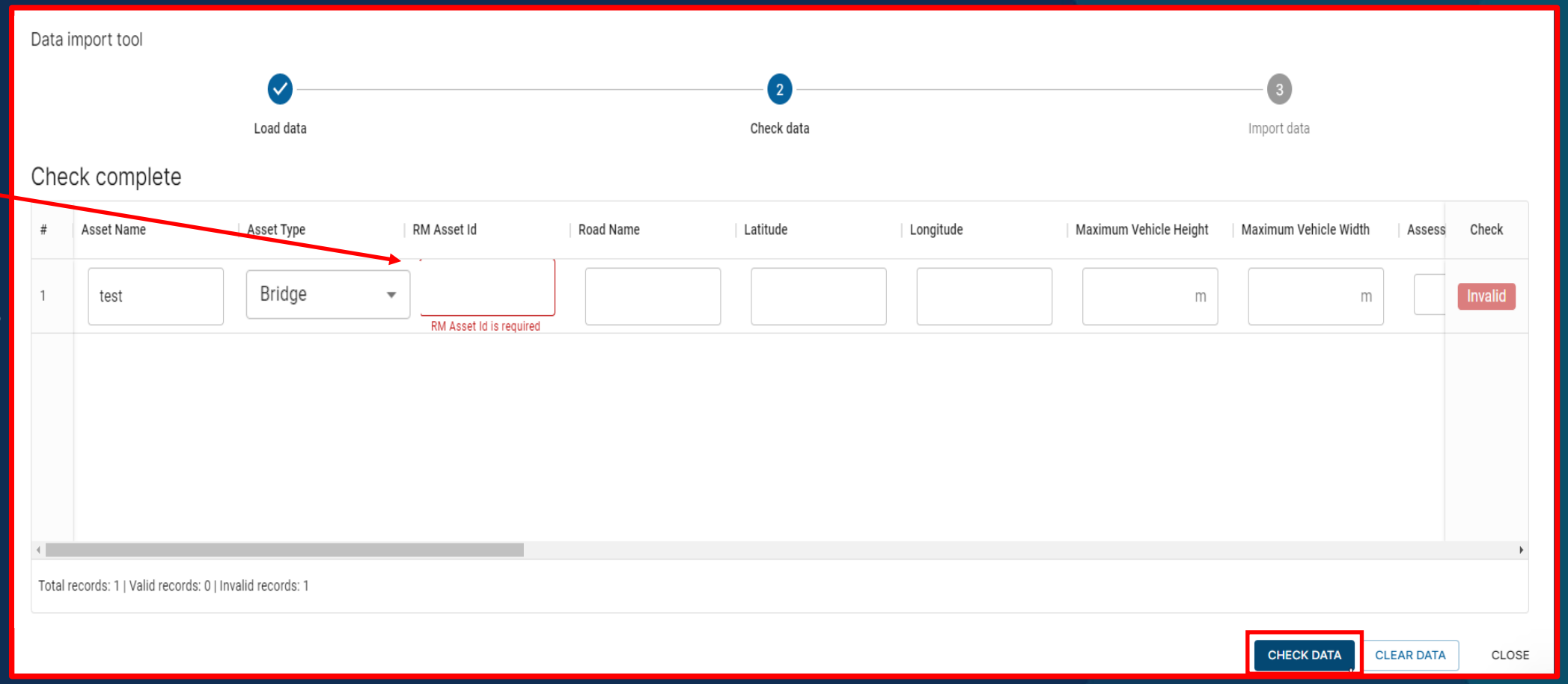


Bulk Upload

3. Click ‘Check Data’ to show any validation errors in red

4. Fix any data errors

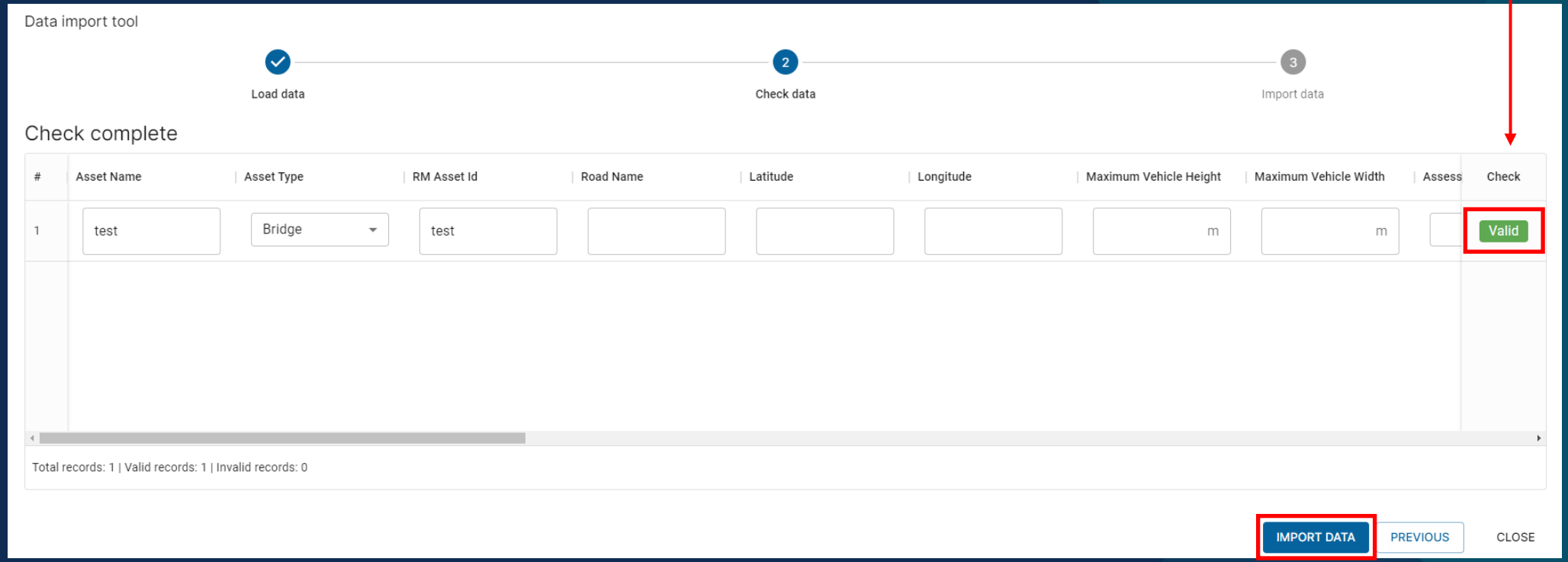
NOTE:
This section shows any data validation errors in red



Bulk Upload

5. Once data errors are fixed, green ‘valid’ box will display on right side

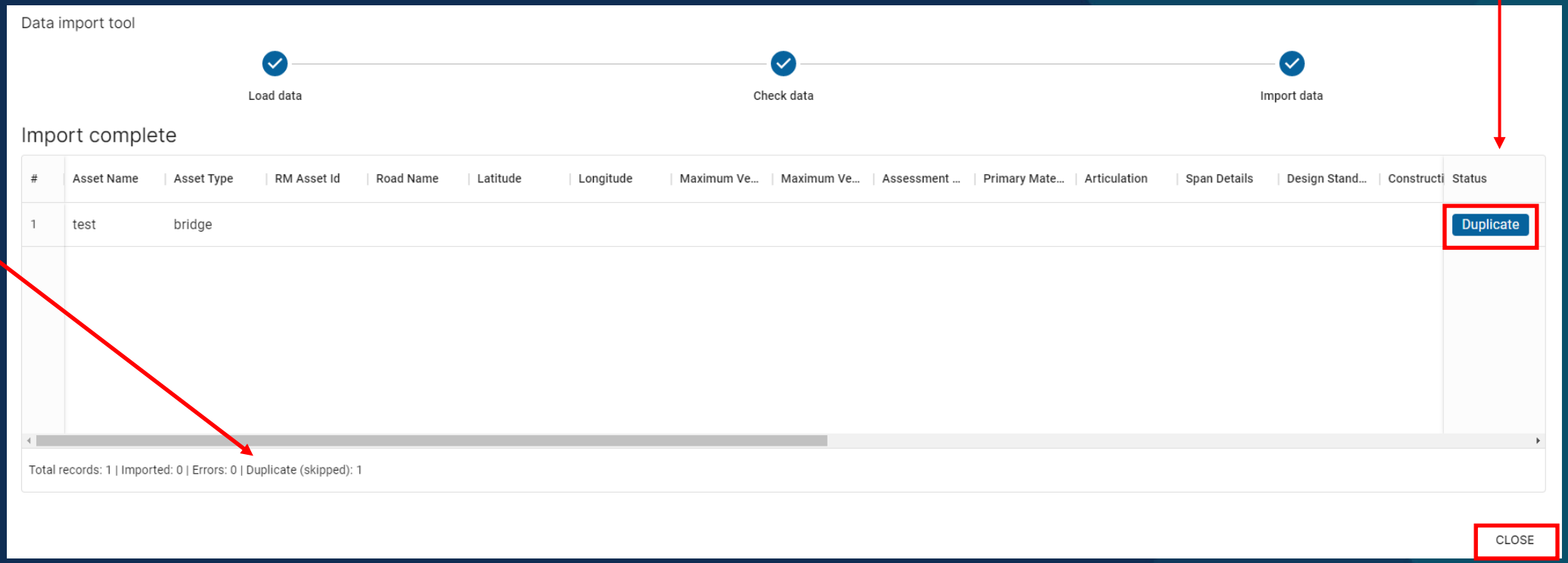
6. Click ‘Import Data’



Bulk Upload

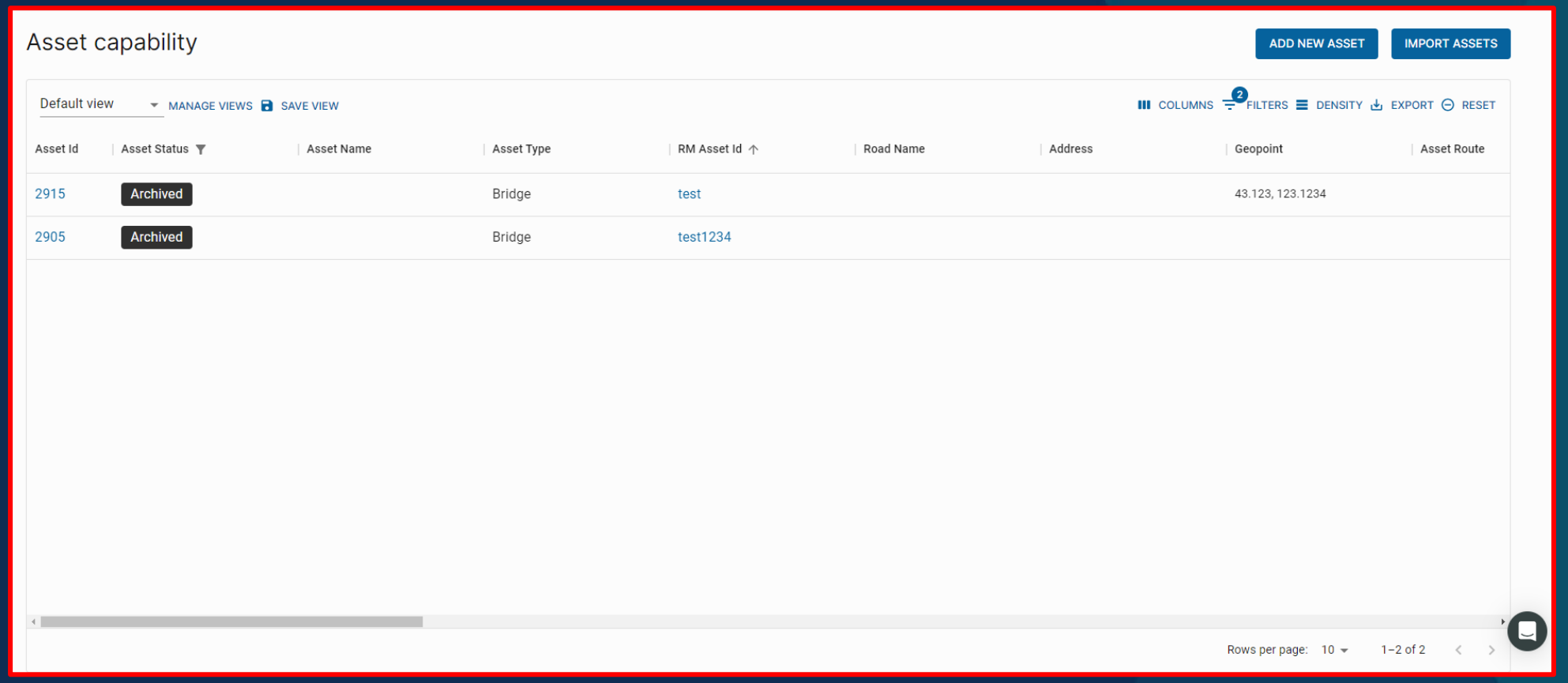
NOTE:
Any duplicate assets will be skipped.

7. Close the tool.



Bulk Upload

If you are happy with the bulk upload, click on each uploaded asset **ID** to open and express interest in SLGAAP (Step 5)



FAQs

What is a valid inspection report?

A valid inspection to any of the state asset inspection manuals.
These types of inspections are detailed inspections where every element is inspected and systematically given a condition rating (1-4) and all major defects are systematically logged and described using a supplied template/format.

A Level 2 inspection is preferred, however, please upload a Level 1 if that is all that is available.
In terms of currency, an inspection needs to have been undertaken within the current inspection cycle for a structure. The recommended intervals between inspections are documented in state manuals and can vary from jurisdiction to jurisdiction and often based on the condition that the structure was in during the previous inspection.

As a guide:

- Concrete: No more than 5 years since last inspection
- Steel: No more than 3 years since last inspection
- Timber: No more than 2-3 years since the last inspection

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Where to find state asset information manuals?

QLD:
https://www.tmr.qld.gov.au/business-industry/Technical-standards-publications/Structures-Inspection-Manual

NSW:
https://roads-waterways.transport.nsw.gov.au/business-industry/partners-suppliers/disciplines/asset-management.html

VIC:
https://www.vicroads.vic.gov.au/business-and-industry/technical-publications/bridges-and-structures

SA:
https://dit.sa.gov.au/documents/road_structures_inspection_manual

WA:
https://www.mainroads.wa.gov.au/globalassets/technical-commercial/technical-library/structures-engineering/asset-management/inspection-inventory-guidelines/detailed-visual-bridge-inspection-guidelines-for-concrete-and-steel-bridges-level-2-inspections.pdf

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Key Terms – Types of assessments

Types	Asset Assessment Detail
Tier 1	Tier 1 bridge assessments are performed using the reference vehicle technique, comparing the worst load effects of an application vehicle on a given structure compared to a reference vehicle which would be considered suitable to travel over the structure. Key inputs to the assessment are: - Span Length, - Span continuity, - Level 2 Structure condition (includes design drawings fully defining all geometry and reinforcing, any material specifications used that define required material performance and as-built records - whether as-built drawings if available).
Tier 1/2D	Using either an in-lane design vehicle or a known historic in lane vehicle, determine the equivalent rating for straddling lane vehicles using a grillage analysis based on measured section properties. Used in situations where the internal design details are not known and an accurate straddling lane reference vehicle is needed to be produced from existing in lane design/known vehicles.
Tier 2	A Tier 2 bridge assessment focuses on using structural engineering principles to identify the theoretical maximum load effects the structure can withstand as governed by the material and configuration (capacity assessment). Two-dimensional analysis techniques such as a grillage analysis or a line model analysis using girder distribution factors are typically used to determine the theoretical loads from the application vehicle load case. The results of the loading analysis are then compared to a theoretical estimate of the structural capacity of each member of the bridge. Key inputs to the assessment are: - As-Built Drawings (if available), - Component Geometries and Material Properties to construct analytical models, - Site Measurements (if necessary), - Assessment Vehicles, and - Level 2 Structure Condition.
Tier 3	Assessment or testing activities that employ methodologies other than typically accommodated in the Australian Standards, including potential benefits over and above a Tier 2 asset assessment.
Asset Improvement Report (AIR)	Where assets do not have the capacity to support the desired heavy vehicle movements on the network an Asset Improvement Report will outline the actions required to improve the asset capacity; repair or renewal.

Key Terms – Types of asset/bridge inspection reports

Level 1	Routine Maintenance Inspection (Level 1) - a visual inspection to check the overall serviceability of the structure and identify maintenance issues.
Level 2	Detailed component Condition Inspection (Level 2) - consists of a detailed report outlining the condition state of every structural component.
Level 3	Detailed Structural Engineering and Material Inspection (Level 3) - analytical analysis of a structure with suitable defect identification and investigation.

Help

If you require any support in completing the nominations:

Contact the Help Centre: 13 NHVR (13 64 87)

Email the SLGAAP Team: roadassetproject@nhvr.gov.au