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**SIMPLIFIED I.T.S. PIT COVER AND FRAME**

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## ABSTRACT

Currently, Vicroads specifies a; cover, frame, cable pit and concrete reinforcement parts as an assembly for ITS pits in their standard drawings. This invention is designed to reduce the amount of parts in this assembly for Vicroads to install by integrating the frame, concrete reinforcement and concrete outer formwork parts into one part; called the "new frame" part. The new frame material may be anything that complies with Vicroads agreed standards.

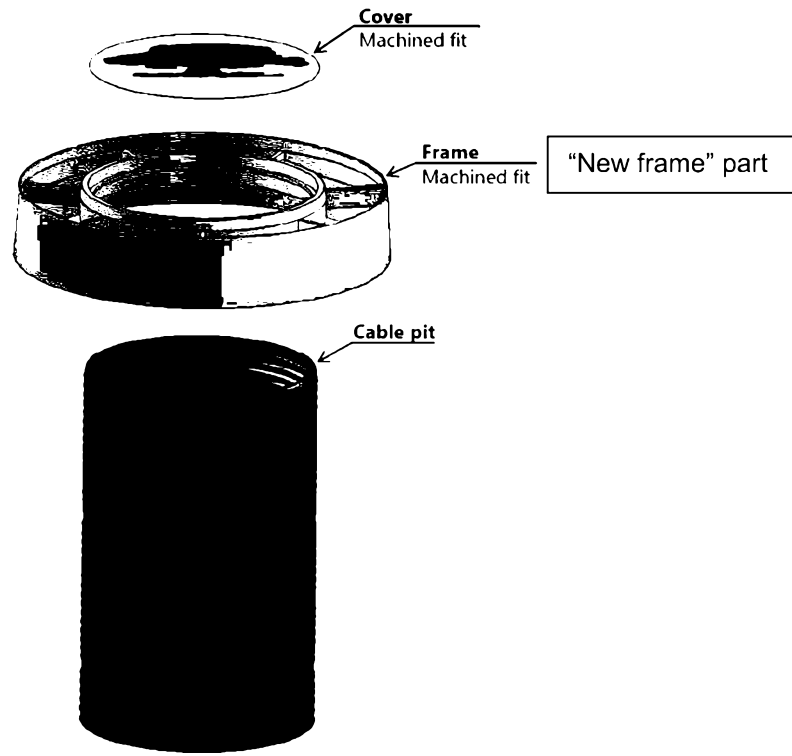


Figure 5 – Blown view of the invention assembly

**EDITORIAL NOTE**

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There are two pages of the description only .

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AUSTRALIA  
Patents Act 1990

COMPLETE SPECIFICATION  
INNOVATION PATENT

SIMPLIFIED I.T.S. PIT COVER AND FRAME

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The following statement is a full description of this invention, including the best method of performing it known to me:

## DESCRIPTION

Currently, Vicroads specifies a; cover, frame, cable pit and concrete reinforcement parts as an assembly for ITS pits in their standard drawings. This invention is designed to reduce the amount of parts in this assembly for Vicroads to install by integrating the frame, concrete reinforcement and concrete outer formwork parts into one part; called the "new frame" part. The new frame material may be anything that complies with Vicroads agreed standards.

Figure 1 is a photo of the new overall product assembly including "new frame" before concrete pour and backfilling.

Figure 2 is the Current Standard Vicroads assembly before concrete pour and backfilling. It is possible to see the concrete reinforcement ring and outer concrete formwork required to be installed before pouring concrete around the manhole cover.

Figure 3 is a photo of contractors filling assemblies with concrete during the field trial with the "new frame" assembly.

Figure 4 is an image of the "new frame" assembly after concreting and backfilling.

Figure 5 is a blown image of the "new frame" assembly in a 3D computer model.

**EDITORIAL NOTE**

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There is one page of the claims only .

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## CLAIMS

1. The integration of the Vicroads standard frame, concrete reinforcement ring and outer concrete formwork parts into one part. The new part is called the "new frame" design. It reduces the amount of components required to complete the installation of Vicroads ITS infrastructure.



**EDITORIAL NOTE**

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There are three pages of drawings only .

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Figure 1 – Invention Product assembly

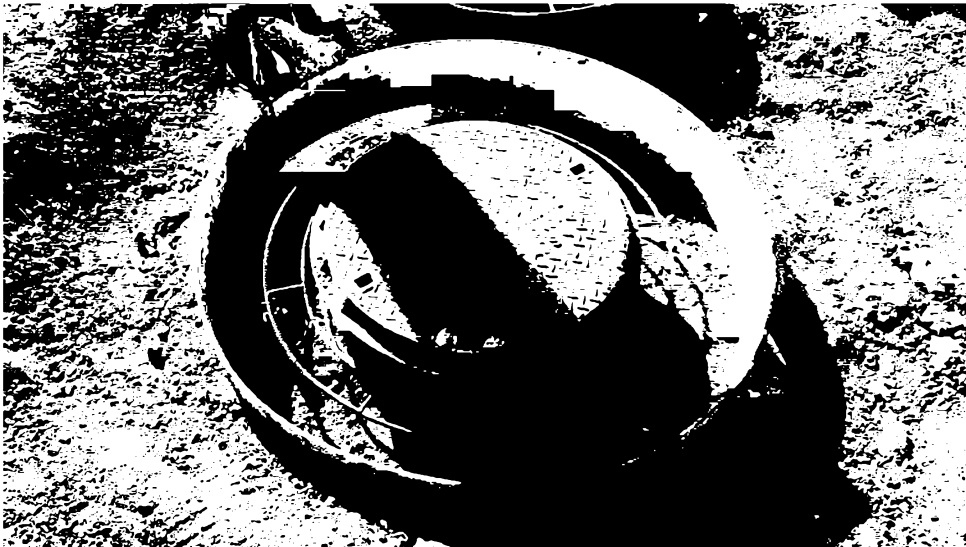


Figure 2 – Current Standard Vicroads assembly before concrete pour



Figure 3 – Field trial, during installation on M80 project with Fulton Hogan, Sunshine, Victoria



Figure 4 – Complete unit fully installed in the field condition

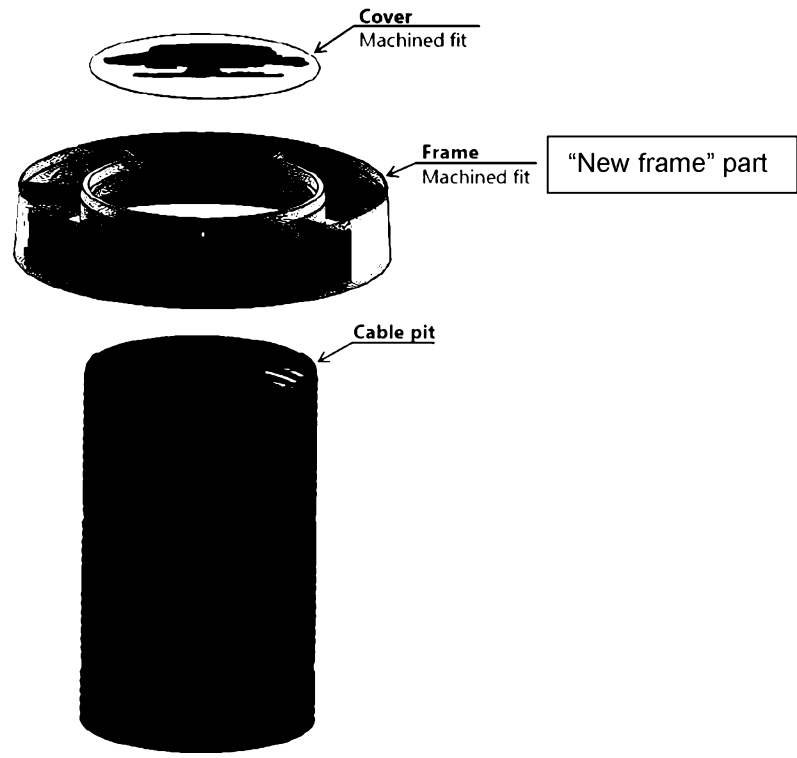


Figure 5 – Blown view of the invention assembly