

Amendments to Freight Handling Code Issue 3 - dated 06 September, 2010

Amendment Notice instructions:

- This Code Amendment Notice contains all approved variations to the current issue of the Freight Handling Code pending re-issue.
- Where a paragraph is marked with a vertical line and the print is in italic this indicates it is a new instruction or if it was a previous change, a further change has been made.
- When reviewing the Freight Handling Code it is important to refer to this Code Amendment Notice to ensure a specific requirement has not been varied.
- The current Code Amendment Notice for the Freight Handling Code will be posted electronically alongside the current issue of the Code.

The following amendments are made to the Freight Handling Code, Issue 3 -

The following pages have been amended / updated:

Section 12 - Containerised Traffic

- Page 12.5 - Diagram 12.1 Wagon Capabilities
- Page 12.7 - Diagram 12.2b Standard Size Container Movements Restrictions - Sth Island
- Page 12.8 - Diagram 12.3 2.9M High Cube Container Movement Restrictions
- Page 12.9 - Diagram 12.4 Axle Load Limits
- Page 12.11 - Diagram 12.6 IB Wagon Load Combinations - 16 Tonne Axle Load
- Page 12.12 - Diagram 12.7 IB Wagon Load Combinations - 18 Tonne Axle Load
- Page 12.13 - Diagram 12.8 IC Wagon Load Combinations - 16 Tonne Axle Load
- Page 12.14 - Diagram 12.9 IC Wagon Load Combinations - 18 Tonne Axle Load
- Page 12.19 - Diagram 12.12 Container Wagon Load Limitations - 3.05M Containers

Section 22 - Oversize & Overweight Loads

- Page 22.12 - Diagram 22.6 Axle Load Limitations - South Island

DIAGRAM 12.1 WAGON CAPABILITIES

| WAGON CLASS | MAX. AXLE LOAD (Tonnes) | MAX. CAPACITY (TEUs) | MAXIMUM 3m BOX WEIGHT | MAXIMUM 6m BOX WEIGHT | MAXIMUM 12m BOX WEIGHT |
|-------------|-------------------------|----------------------|-----------------------|-----------------------|------------------------|
| HK | 16 | 2.5 | 14t | 29.5t (28t)* | 30.5t |
| IA | 18 | 2.5 | 15.5t | 31.5t (31.3t)* | 35t |
| IB | 18 | 3 | - | 28.5t | 30.5t |
| IC | 18 | 3 | - | 30.5t | 35t # |
| IM | 18 | 3 | - | 32.5t | 35.0t |
| PK | 14 | 2 | 14t | 25.5t | 30.5t |
| UDA | 14 | 1 | 25.5t | 35t | - |
| UDK | 14 | 1 | - | 35t | - |
| UK, UKA | 14 | 2.5 | 14t | 25t (23.9t)* | 34t # |
| USQ | 14 | 2 | - | 25t | 30t |

Notes:

For some wagon classes additional loading rules apply for heavy containers.
See diagrams 12.5 to 12.12 for further information.

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Maximum 12m box weight for IC and UK wagons has been increased. If over 30.5tonne, no other container allowed on wagon.

This is to be reviewed within six months and may revert to the original weights at that time.

*

Weight in (brackets) is the maximum weight if container loaded on outer pins (No other container allowed on wagon)

**DIAGRAM 12.2b STANDARD SIZED CONTAINER MOVEMENT
RESTRICTIONS: SOUTH ISLAND**

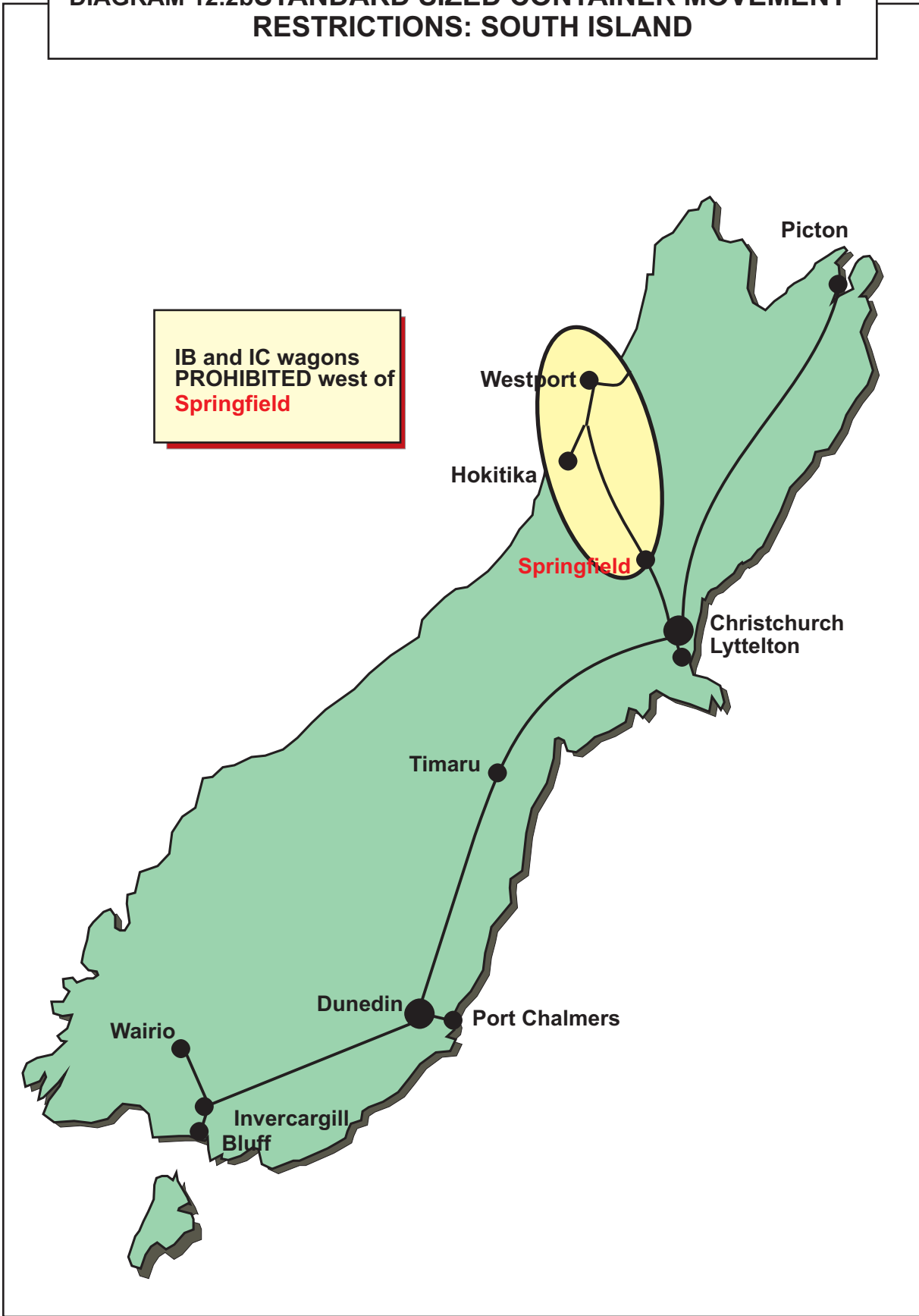


DIAGRAM 12.3 2.9m HIGH CUBE CONTAINER MOVEMENT RESTRICTIONS

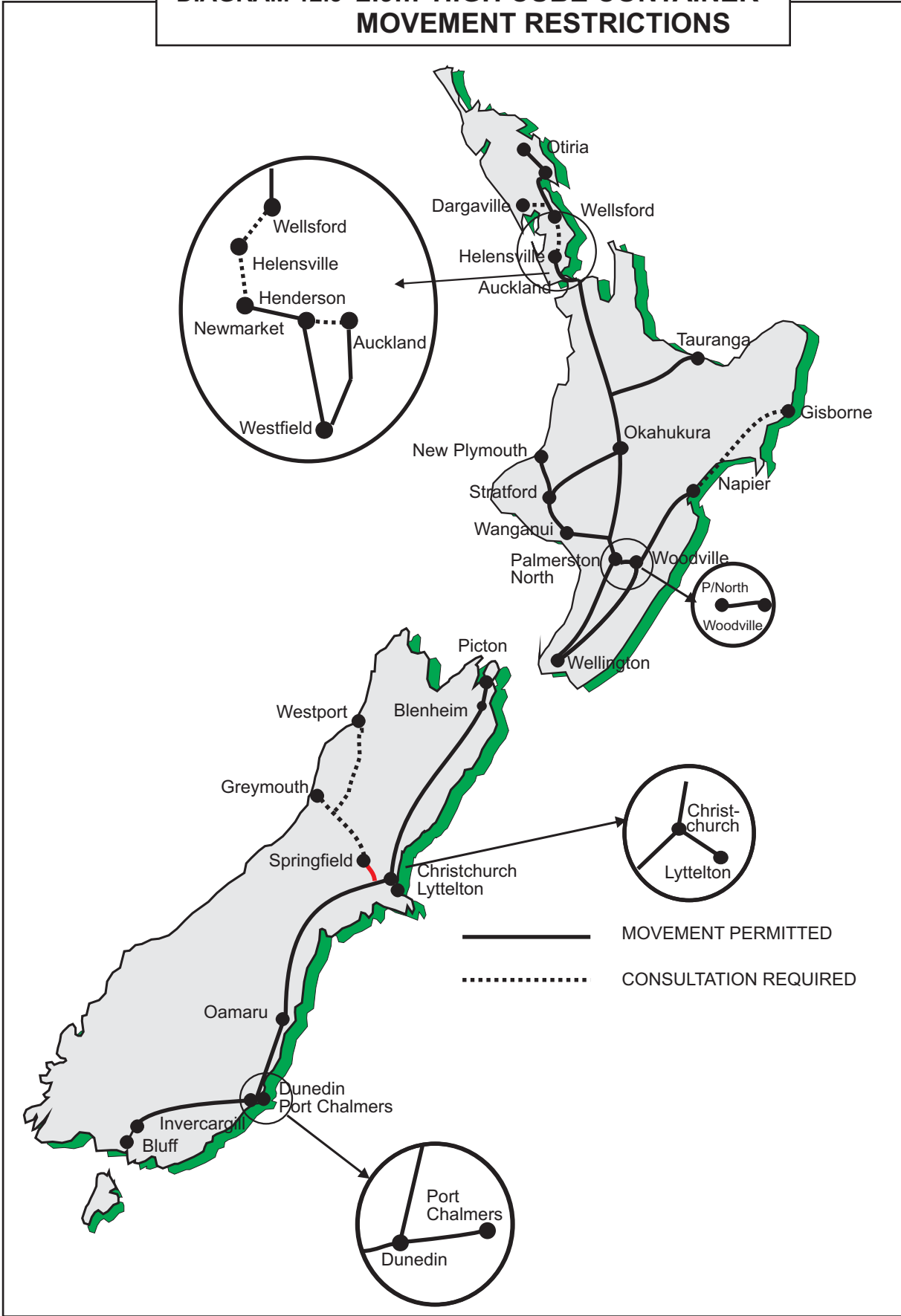


DIAGRAM 12.4 AXLE LOAD LIMITATIONS

Refer Section 22
Oversize & Overweight Loads

Page 22.11 and 22.12 for Axle Load
Limitations North & South Islands

**DIAGRAM 12.6 IB WAGON LOAD COMBINATIONS:
16 tonne AXLE LOAD**

16 TONNE AXLE LOAD: THREE × 6 m CONTAINERS

| First End Container: Maximum Gross Weight (tonnes) | Middle Container: Maximum Gross Weight (tonnes) | Second End Container: Maximum Gross Weight (tonnes) |
|--|---|---|
| 12.5 | 24.0 | 12.5 |
| 13.0 | 23.0 | 13.0 |
| 13.5 | 21.0 | 13.5 |
| 14.5 | 19.0 | 14.5 |
| 15.5 | 17.0 | 15.5 |
| 16.5 | 15.0 | 16.5 |
| 17.5 | 13.0 | 17.5 |
| 18.5 | 11.0 | 18.5 |
| 19.5 | 9.0 | 19.5 |
| 20.5 | 7.0 | 20.5 |
| 21.5 | 5.0 | 21.5 |
| 22.5 | 3.0 | 22.5 |
| 23.0 | No Middle Container | 23.0 |
| 24.0 | No Middle Container | 24.0 |

**16 TONNE AXLE LOAD:
ONE × 12 m & ONE × 6 m CONTAINER**

| 12 m Container: Maximum Gross Weight (tonnes) | 6 m Container: Maximum Gross Weight (tonnes) |
|---|--|
| 30.5 | 16.5 |
| 30.0 | 16.5 |
| 29.0 | 17.0 |
| 28.0 | 17.5 |
| 27.0 | 17.5 |
| 26.0 | 18.0 |
| 25.0 | 18.5 |
| 24.0 | 18.5 |
| 23.0 | 19.0 |
| 22.0 | 19.0 |
| 21.0 | 19.5 |
| 20.0 | 20.0 |
| 19.0 | 20.0 |
| 18.0 | 20.5 |
| 17.0 | 21.0 |
| 16.0 | 21.0 |
| 15.0 | 21.5 |
| 14.0 | 22.0 |
| 13.0 | 22.0 |
| 12.0 | 22.5 |
| 11.0 | 23.0 |
| 10.0 | 23.0 |
| 9.0 | 23.5 |
| 8.0 | 23.5 |

**DIAGRAM 12.7 IB WAGON LOAD COMBINATIONS:
18 tonne AXLE LOAD**

18 TONNE AXLE LOAD: THREE × 6 m CONTAINERS

| First End Container: Maximum Gross Weight (tonnes) | Middle Container: Maximum Gross Weight (tonnes) | Second End Container: Maximum Gross Weight (tonnes) |
|--|---|---|
| 16.0 | 24.0 | 16.0 |
| 17.0 | 22.0 | 17.0 |
| 18.0 | 20.0 | 18.0 |
| 19.0 | 18.0 | 19.0 |
| 20.0 | 16.0 | 20.0 |
| 21.0 | 14.0 | 21.0 |
| 22.0 | 12.0 | 22.0 |
| 23.0 | 10.0 | 23.0 |
| 24.0 | 8.0 | 24.0 |
| 25.0 | 6.0 | 25.0 |
| 26.0 | 4.0 | 26.0 |
| 27.0 | 2.0 | 27.0 |
| 28.0 | No Middle Container | 28.0 |
| 28.5 | No Middle Container | 24.0 |

**18 TONNE AXLE LOAD:
ONE × 12 m & ONE × 6 m CONTAINER**

| 12 m Container: Maximum Gross Weight (tonnes) | 6 m Container: Maximum Gross Weight (tonnes) |
|---|--|
| 30.5 | 21.0 |
| 30.0 | 21.0 |
| 29.0 | 21.5 |
| 28.0 | 21.5 |
| 27.0 | 22.0 |
| 26.0 | 22.5 |
| 25.0 | 22.5 |
| 24.0 | 23.0 |
| 23.0 | 23.5 |
| 22.0 | 23.5 |
| 21.0 | 24.0 |

**DIAGRAM 12.8 IC WAGON LOAD COMBINATIONS:
16 tonne AXLE LOAD**

16 TONNE AXLE LOAD: THREE × 6 m CONTAINERS

| First End Container: Maximum Gross Weight (tonnes) | Middle Container: Maximum Gross Weight (tonnes) | Second End Container: Maximum Gross Weight (tonnes) |
|--|---|---|
| 8.5 | 30.5 | 8.5 |
| 11.5 | 25.0 | 11.5 |
| 12.5 | 23.0 | 12.5 |
| 13.5 | 21.0 | 13.5 |
| 14.5 | 19.0 | 14.5 |
| 15.5 | 17.0 | 15.5 |
| 16.5 | 15.0 | 16.5 |
| 17.5 | 13.0 | 17.5 |
| 18.5 | 11.0 | 18.5 |
| 19.5 | 9.0 | 19.5 |
| 20.5 | 7.0 | 20.5 |
| 21.5 | 5.0 | 21.5 |
| 22.5 | 3.0 | 22.5 |
| 23.0 | No Middle Container | 23.0 |
| 24.0 | No Middle Container | 24.0 |

**16 TONNE AXLE LOAD:
ONE × 12 m & ONE × 6 m CONTAINER**

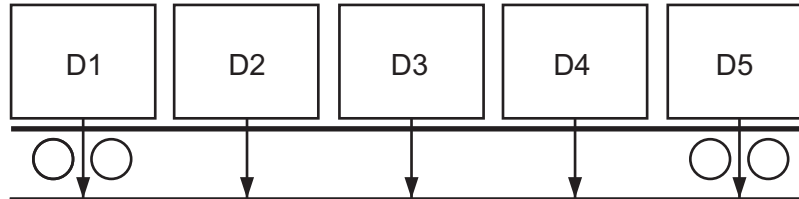
| 12 m Container: Maximum Gross Weight (tonnes) | 6 m Container: Maximum Gross Weight (tonnes) |
|---|--|
| 30.5 | 16.0 |
| 30.0 | 16.0 |
| 29.0 | 16.5 |
| 28.0 | 17.0 |
| 27.0 | 17.0 |
| 26.0 | 17.5 |
| 25.0 | 17.5 |
| 24.0 | 18.0 |
| 23.0 | 18.5 |
| 22.0 | 18.5 |
| 21.0 | 19.0 |
| 20.0 | 19.5 |
| 19.0 | 19.5 |
| 18.0 | 20.0 |
| 17.0 | 20.0 |
| 16.0 | 20.5 |
| 15.0 | 21.0 |
| 14.0 | 21.0 |
| 13.0 | 21.5 |
| 12.0 | 22.0 |
| 11.0 | 22.0 |
| 10.0 | 22.5 |
| 9.0 | 23.0 |
| 8.0 | 23.0 |

**DIAGRAM 12.9 IC WAGON LOAD COMBINATIONS:
 18 tonne AXLE LOAD**

| 18 TONNE AXLE LOAD: THREE × 6 m CONTAINERS | | |
|---|--|--|
| First End Container: Maximum Gross Weight (tonnes) | Middle Container: Maximum Gross Weight (tonnes) | Second End Container: Maximum Gross Weight (tonnes) |
| 12.5 | 30.5 | 12.5 |
| 13.0 | 30.0 | 13.0 |
| 14.0 | 28.0 | 14.0 |
| 15.0 | 26.0 | 15.0 |
| 16.0 | 24.0 | 16.0 |
| 17.0 | 22.0 | 17.0 |
| 18.0 | 20.0 | 18.0 |
| 19.0 | 18.0 | 19.0 |
| 20.0 | 16.0 | 20.0 |
| 21.0 | 14.0 | 21.0 |
| 22.0 | 12.0 | 22.0 |
| 23.0 | 10.0 | 23.0 |
| 24.0 | 8.0 | 24.0 |
| 25.0 | 6.0 | 25.0 |
| 26.0 | 4.0 | 26.0 |
| 27.0 | 2.0 | 27.0 |
| 28.0 | No Middle Container | 28.0 |
| 28.5 | No Middle Container | 20.0 |

| 18 TONNE AXLE LOAD: ONE × 6 m & ONE × 12 m CONTAINER | |
|---|--|
| 6 m Container: Maximum Gross Weight (tonnes) | 12 m Container: Maximum Gross Weight (tonnes) |
| 30.0 | — |
| 29.0 | 3.5 |
| 28.0 | 6.5 |
| 27.0 | 10.0 |
| 26.0 | 13.0 |
| 25.0 | 16.0 |
| 24.0 | 19.5 |
| 23.0 | 22.5 |
| 22.0 | 25.5 |
| 21.0 | 28.5 |
| 20.0 | 30.5 |

**DIAGRAM 12.12 CONTAINER-WAGON LOAD LIMITATIONS:
3.05 m CONTAINERS**



| FOR UK/UKA | MAXIMUM GROSS WEIGHT COMBINATIONS (tonnes) | | | | |
|-----------------------|---|-----|-------|-----|----|
| | 14 | 7.5 | - | 7.5 | 14 |
| | 14 | - | 14 | - | 14 |
| | 12 | 8 | empty | 8 | 12 |
| | 11 | 10 | - | 10 | 11 |
| | 9 | 8 | 8 | 8 | 9 |

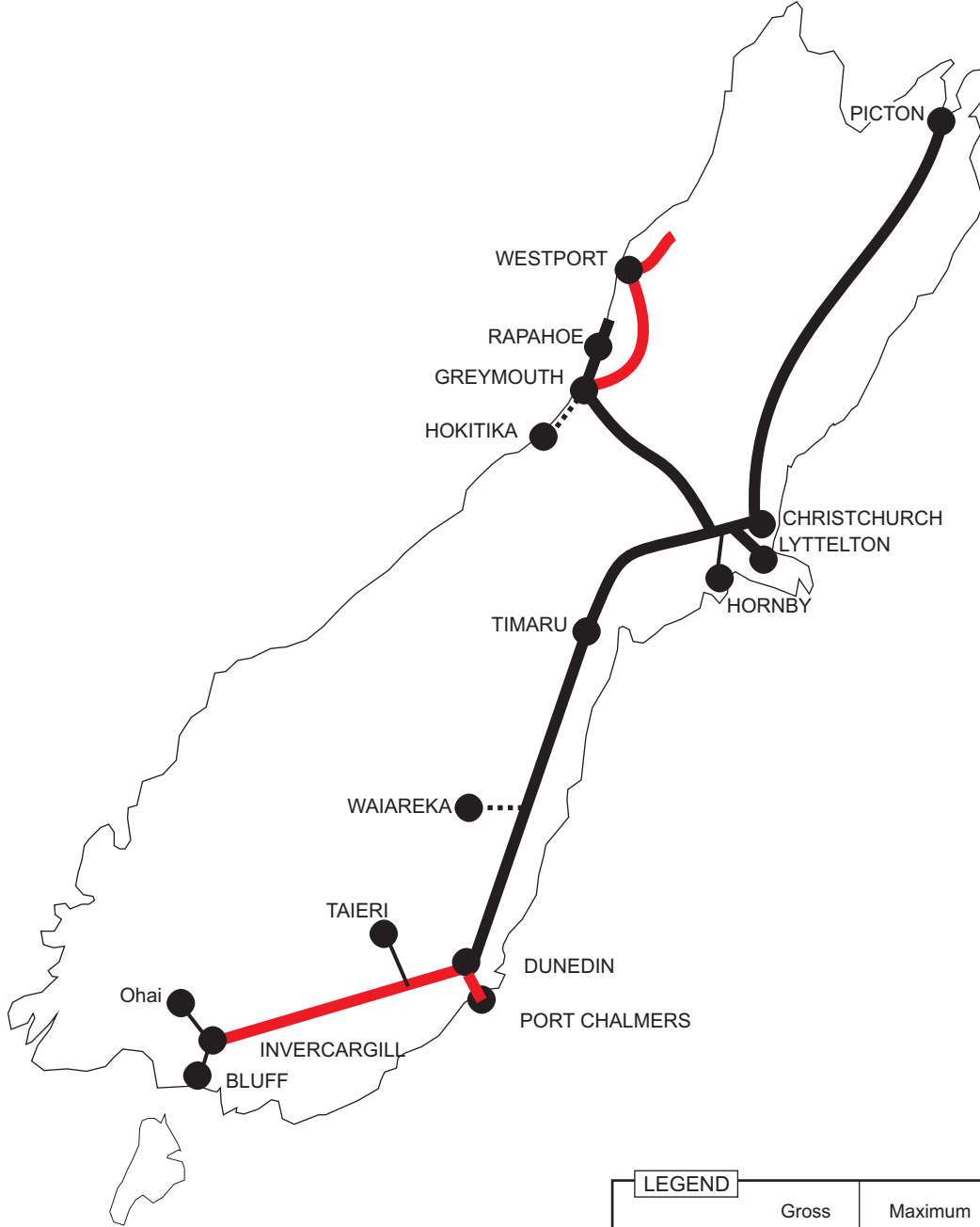
| FOR HK | MAXIMUM GROSS WEIGHT COMBINATIONS (tonnes) | | | | |
|-------------------|---|-------|----|-------|----|
| | 14 | 14 | - | - | 14 |
| | 14 | empty | 14 | empty | 14 |
| | 12 | 13 | - | 13 | 12 |
| | 13 | 12 | - | 12 | 13 |
| | 10 | 10 | 10 | 10 | 10 |

| FOR IA 18 t/axle | MAXIMUM GROSS WEIGHT COMBINATIONS (tonnes) | | | | |
|---------------------------------|---|------|-------|----|----|
| | 15 | 15.5 | - | - | 15 |
| | 15 | 7 | 15 | - | 15 |
| | 14 | 14 | empty | 14 | 14 |
| | 13 | 13 | 4 | 13 | 13 |
| | 11 | 11 | 12 | 11 | 11 |
| 15 | 13 | - | 13 | 15 | |

| FOR IA 16 t/axle | MAXIMUM GROSS WEIGHT COMBINATIONS (tonnes) | | | | |
|---------------------------------|---|-------|-------|----|----|
| | 15 | 12 | - | - | 15 |
| | 15 | empty | 15 | - | 15 |
| | 12 | 11 | empty | 11 | 12 |
| | 12 | 12 | - | 12 | 12 |
| | 10 | 10 | 9 | 10 | 10 |
| 15 | 9.5 | - | 9.5 | 15 | |

**DIAGRAM 22.6 AXLE LOAD LIMITATIONS:
 SOUTH ISLAND**

NOTE: This is a general guide. For further information contact your KiwiRail Key Account Executive (KAE).



| LEGEND | | |
|--------|------------|-------------------|
| | Gross Load | Maximum Axle Load |
| | 72 tonne | 18 tonne |
| | 65 tonne | 16.3 tonne |
| | 57 tonn | 14.3 tonne |

Amendment Approval

Engineering:

 06 September, 2010

Manager, Professional Services Group, KiwiRail