



129,000 Pound Evaluation of I-84B

M.P. 0.00 to M.P 19.83

(Case #201804I84B)

Executive Summary

J.R. Simplot Company submitted a request for 129,000 pound trucking approval on I-84B between milepost (MP) 0.00 at the intersection with SH-19 and MP 19.83 at the intersection with I84 at exit 27, for transportation of raw potatoes. Currently 700 trips are made annually at 105,500 pounds but if approved will reduce the number by 20%. The requested section of I-84B is designated as red routes and as such all trucks must adhere to the 6.5-foot off-track and 115 foot overall vehicle length criteria. ITD Bridge Section confirms two bridges on the route will safely support 129,000 pound vehicles. District 3 analysis shows this section of road has a condition ranging from very poor to fair. The Office of Highway Safety analysis shows this section of I-84B has one Non-Interstate High Accident Intersection Location (HAL) in the top 200 statewide ranking and has no HAL Clusters in the top 200. The Division of Motor Vehicles, Highway Safety Office, Bridge Asset Management Office, and District 3 all recommend proceeding with this request.

Detailed Analysis

Division of Motor Vehicles (DMV) Review

All Idaho Transportation Department routes are currently categorized by their ability to handle various extra-length vehicle combinations and their off-tracking allowances. The categories used when considering allowing vehicle combinations to carry increased axle weights above 105,500 pounds and up to 129,000 pounds are:

- Blue routes at 95 foot overall vehicle length and a 5.50-foot off-track
- Red routes at 115 foot overall vehicle length and a 6.50-foot off-track.

Off-tracking is the turning radius of the vehicle combination, which assists in keeping them safely in their lane of travel. Off-tracking occurs because the rear wheels of trailer trucks do not pivot, and therefore will not follow the same path as the front wheels. The greater the distance between the front wheels and the rear wheels of the vehicle, the greater the amount of off-track. The DMV confirms that the requested routes falls under one of the above categories and meets all length and off-tracking requirements for that route. **More specifically, the requested section of I84B from milepost 0.0 to 0.94, and I84B from milepost 19.68 to 19.83, are designated as red routes and as such all trucks must adhere to the 6.5-foot off-track and 115 foot overall vehicle length criteria.**

Bridge Review

Bridges on all publicly owned routes in Idaho, with the exception of those meeting specific criteria, are inspected every two years at a minimum to ensure they can safely accommodate vehicles. A variety of inspections may be performed including routine inspections, in-depth inspections, underwater inspections, and complex bridge inspections. All are done to track the current condition of a bridge and make repairs if needed.

When determining the truck-carrying capacity of a bridge, consideration is given to the types of vehicles that routinely use the bridge and the condition of the bridge. Load limits may be placed on a bridge if, through engineering analysis, it is determined the bridge cannot carry legal truck loads.

ITD Bridge Asset Management has reviewed the two bridges pertaining to this request and has determined they will safely support the 129,000-pound truck load, provided the truck's axle configuration conforms to legal requirements. To review load rating data for each of the bridges, see the Bridge Data chart below.

ITD District 3 Evaluation

This segment has been evaluated and the District recommends approval of this request.

In response to the application to add I-84B (Centennial Way) to the list of approved 129,000-pound trucking routes. District 3 has evaluated the roadway characteristics, pavement condition, and traffic volumes on I-84B between MP 0.00 – MP 19.83. This route connects I-84 with SH 19 which are both approved 129K routes. Approval of this section will reduce hauling distances into the industrial and agricultural areas off SH 19.

Roadway Characteristics

This roadway is a rural principle arterial from MP 0.00 to MP 19.83 connecting I-84 with SH 19. The roadway is mostly flat, the only grades are the interstate overpass and a railroad overpass. The roadway is a four lane divided highway with concrete islands between the travel lanes with the exception of the left turn bays at the intersection and overpasses.

Table 1. I-84B Roadway Geometry

Mileposts		Lane Width (ft)	Number of Lanes	Terrain	Left Turn Lane Type	Right Turn Lane Type	Right Paved Shoulder Width (ft)	Parking
0.000	0.800	12.00	2	Flat	Left turn bays at the intersections	None	Curbed	No
0.800	0.940	12.00	2	Flat	A single left turn bay	None	Curbed	No
19.680	19.830	12.00	2	Flat	A single left turning bay/lane	A single right turn bay exists	Curbed	No

Pavement Condition

The requested section of highway is asphalt and is in fair to very poor condition. The poor conditions are related to rutting. Spring breakup limits do not pertain to this section at this time.

Table 2. 2016 TAMS Visual Survey Data

Mileposts		Pavement Type	Deficient	Deficient Reason	Condition	Cracking Index	Roughness Index	Rut Average (in)
0.000	0.800	Flexible	No		Fair	5	2.83	0.22
0.800	0.940	Flexible	Yes	Rutting	Poor	5	2.43	0.06
19.68	19.83	Flexible	Yes	Rutting	Very Poor	4.50	1.65	0.11

Traffic Volumes

The speed limit of the highway varies between 35 and 45 mph. There are no stop lights in this segment. The traffic volumes are provided below. The route is made up of commuter, commercial and agricultural traffic.

Table 3. 2016 Traffic Volumes

Mileposts		AADT	CAADT	% TRUCKS
0.000	0.800	17213	1304	8%
0.800	0.940	12000	1200	10%
19.68	19.83	6608	562	9%

Truck Ramps

No runaway truck ramps exist.

Port of Entry (POE)

The POE does not maintain any rover sites on this section of highway.

Highway Safety Evaluation

This I-84 Business Loop segment has one Non-Interstate High Accident Intersection Location (HAL) in the top 200 statewide ranking and has no HAL Clusters in the top 200. The locations are shown in the table below with their statewide ranking.

Analyses of the 5-year accident data (2014-2018) shows there were a total of 70 crashes involving 133 units (1 fatality and 35 injuries) on Centennial Way between I-84 and Simplot Blvd of which, 6 crashes involved tractor-trailer combinations. Of the crashes involving tractor trailers, the contributing circumstances were failed to yield, inattention, improper turn and improper use of turn lane. No injuries and no fatalities resulted from the crashes with tractor trailers. Implementation of 129,000 pound trucking is projected to reduce truck traffic on this route.

Table of HAL Segments I 84 BL:

Route	Statewide Rank	Milepost Range	Length (miles)	County
I 84B	5	19.83	Intersection	Canyon
I 84B	492	0.43	Intersection	Canyon

Additional Data:***Bridge Data:***

Route Number: I-84B/Centennial Way
Department: Bridge Asset Management
Date: 8/20/2019

Route	From:	Intersection with SH-19
	Milepost:	0.00
	To:	Intersection with I-84
	Milepost:	0.94

Highway Number	Milepost Marker	Bridge Key	121 Rating ^a (lbs)
84B	0.21	12180	250,000
84B	0.86	12185	268,000

^a: The bridge is adequate if it has a rating value greater than 121,000 pounds or is designated as "OK EJ" (okay by engineering judgment).