

MEMORANDUM

State of Alaska Department of Transportation & Public Facilities

TO: Sarah E. Schacher, P.E.,
Preconstruction Engineer
Northern Region

DATE: September 1, 2017

FILE NO: I:\Traffic
Data\Design\2017\McCarthyRd@Chokosna_FNHwy0
0125

**TELEPHONE
NO:** 451-5150

FROM: *JMC*
Judy Chapman
Planning Chief
Northern Region

SUBJECT: McCarthy Rd MP 27 Chokosna River Bridge
#1193 FNHWY00125/0850028
Design Designation Request

Please approve the attached design designation by signing the endorsement below which enables your staff to proceed.

Any questions should be directed to Scott Vockeroth at 451-2251.

Sarah E. Schacher

Sarah E. Schacher, P.E., Preconstruction Engineer

9/8/2017

Date

SGV

cc: Colleen Ackiss, P.E., Engineering Manager, Northern Region

Attachment

Please circulate and return to Traffic Data & Forecasting Manager	
Planning Manager (outside FNSB)	<i>MLC</i>
Planning Chief	<i>JMC</i>
Fairbanks Area Planner (FNSB)	
Traffic & Safety	
Any changes, additions, or questions, Please write on this sheet	

DESIGN DESIGNATION
Northern Region Planning
Traffic Data & Forecasting

ROUTE NAME: Edgerton Hwy/McCarthy Rd
STATE ROUTE NO: 198000
CDS MILEAGE: 60.6805-60.6995
FUNCTIONAL CLASS: Major Collector
URBAN/RURAL: Rural

	YEAR	AADT	%
AADT	2016	85	
	2030	95	
	2040	110	
DHV	2030		21.40%
	2040		25
D			35-65
T			11.00 %
			9.00
			1.25
			0.30
			0.30
		0.15	Total
			Class 5
			Class 6
			Class 8
			Class 9
			Class 10
ESAL'S (Design Lane)	To Be Provided by Design		

MEMORANDUM

State of Alaska
Department of Transportation & Public Facilities
Northern Region Design and Engineering Services

TO: Judy Chapman
Planning Chief
Northern Region

DATE: July 11, 2017

FILE NO: H:\Projects\McCarthy_Rd\FNHWHY00125_McCarthy_Rd_MP27_C
hokosnaBrdg\Design\PS&E\Design_Designation&Criteria

THRU: *TW For* Sarah E. Schacher, P.E.
Preconstruction Engineer
Northern Region

PHONE NO: 907-451-5179

FROM: Colleen M. Ackiss, P.E. *CMA*
Engineering Manager
Northern Region

FAX NO: 907-451-5126

SUBJECT: McCarthy Road MP 27 Chokosna
River Bridge #1193
FNHWY00125/0850028
Design Designation Request

Please provide a Design Designation for the subject project.

- Present AADT
- Design Year AADT (2040)
- Mid-Design Period AADT (2030)
- Design Hourly Volume
- Directional Split
- Percent Trucks
- Design Functional Classification
- Intersection Turning Movement Counts at:
- Other (*Specify*)

The project is scheduled for construction in FY2019.

Please complete the attached Traffic Data Request Form.

Attachment: as stated

BD Btd\lsd *44*

Traffic Data Request Form

TDR Form-1-10/20/03

Alaska Department of Transportation & Public Facilities

Requested By: <i>BRUCE DIANOSKI</i>		Design Project Number: <i>NFWY00125</i>	Date Requested: <i>7/10/17</i>																		
Base Year: Base Year Total AADT: <i>85</i> AADT Growth Rate Forward (%/yr): <i>1.25</i> End Year: <i>2040</i> Back Cast (%/yr): Begin Year:		Common Route Name: <i>McCarthy Road</i> Functional Class: <i>Collector</i> Urban/Rural <i>Rural</i>	CDS Route Name: <i>CDS 198000</i> CDS M.P. Interval: <i>26.1396 To 28.1716</i>																		
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Truck Category</th> <th>Load Factor (ESALs per Truck)</th> <th>% of Total AADT in Truck Category</th> </tr> </thead> <tbody> <tr> <td>2-axle</td> <td></td> <td></td> </tr> <tr> <td>3-axle</td> <td></td> <td><i>See</i></td> </tr> <tr> <td>4-axle</td> <td></td> <td><i>attached</i></td> </tr> <tr> <td>5-axle</td> <td></td> <td></td> </tr> <tr> <td>≥ 6-axle</td> <td></td> <td></td> </tr> </tbody> </table>	Truck Category	Load Factor (ESALs per Truck)	% of Total AADT in Truck Category	2-axle			3-axle		<i>See</i>	4-axle		<i>attached</i>	5-axle			≥ 6-axle			<p>Lane Configuration Sketch: (Designer: Provide sketch of lane layout. Number each lane and show directions.)</p>		
	Truck Category	Load Factor (ESALs per Truck)	% of Total AADT in Truck Category																		
	2-axle																				
	3-axle		<i>See</i>																		
	4-axle		<i>attached</i>																		
	5-axle																				
≥ 6-axle																					
Percent of Base Year Total AADT for Each Numbered Lane in Configuration Sketch:		Comments:																			
Lane # <i>1</i>	% <i>35</i>																				
Lane # <i>2</i>	% <i>65</i>																				
Lane #	%																				
Lane #	%																				
Lane #	%																				
Data Provided By: <i>Scott Vockerath</i>	Provider's Signature: 	Date Provided: <i>9/1/17</i>																			

Figure 6-1. Traffic Data Request (TDR) Form



Report Route Log
CDS Route EDGERTON HWY/MCCARTHY RD (198000)
From Milepoint 58
To Milepoint 63
Filter FacilityType INTERCHANGE RAMP;NON-INVENTORY;WYE;SECONDARY FERRY ACCESS;ROUNDBOUT;PRIMARY FERRY ACCESS;NON-INTERCHANGE RAMP;MAINLINE;CONNECTOR

Milepoint	Attribute	Side	Feature	CDS	Description	Viewer
58	Maintenance Station	-	-		ERNESTINE STATION (Start at Milepoint 0)	
58	Functional Class	-	-		MAJOR COLLECTOR (Start at Milepoint 0)	
58	Speed	-	-		30 (Start at Milepoint 32.1089)	
58.8525	Milepost	R	-		25	
59.8981	Milepost	R	-		26	
60.6295	Milepost	L	-		27	
60.6805	Bridge	U	-		Start CHOKOSNA RIVER (1193)	
60.6995	Bridge	U	-		End CHOKOSNA RIVER (1193)	
60.7065	Traffic Station	-	-		32352000	
62.8415	Bridge	U	-		Start GILAHINA RIVER (1194)	
62.8495	Bridge	U	-		End GILAHINA RIVER (1194)	
62.8852	Milepost	R	-		29	

Computations and Historic Data

Project: McCarthy Rd MP 27 Chokosna River Bridge
Project # FNHWY00125/0850028

Historic AADT

Route:	198000	Year	AADT
Station:	32352000	2000	
	Edgerton Hwy @ Chokosna Bridge	2001	
Milepoint:	60.706	2002	54
		2003	51
		2004	79
		2005	55
		2006	79
		2007	
		2008	110
		2009	100
		2010	
		2011	104
		2012	136
		2013	116
		2014	115
		2015	83

Growth rate for calculations was 1.25% due to historic traffic patterns

Growth Rate factors

2035	1.190
2050	1.347

Future AADTs

Year	AADT
2016	85
2030	95
2040	110

K-factor 21.40%

DHV=	2030	20
	2040	25

Direction Split (D)= 35-65

Class Data

198000		CDS MP	Year	Percent By Class							Total Truck %
Station #	Description			4	5	6	8	9	10	13	
32346000	Edgerton East of Richardson Hwy	1.161	2016	0.00	9.00	1.25	0.30	0.30	0.15	0.00	11.00
	Load Factors			1	0.50	0.85	1.20	1.55	2.24	2.24	
	# Axles			2/3	2	3	4	5	6	7+	