

Feasibility Study of Developing and Creating a Standardized Subset of Bridge Plans

Description

Meta Fields Project Completion Year : 2016 Project Starting Year : 2013 Other Documents 0 Other Documents File : 1915 Primary Sponsor Contact Info : Colorado Department of Transportation 4201 East Arkansas Avenue Denver, CO 80222 USA Sponsor Contact Aziz Khan aziz.khan@dot.state.co.us (303) 757-9522 Project Length : 24 Budget : 0.00 Key Words :

Bridge approaches; Bridge construction; Bridge design; Cost effectiveness; Feasibility analysis; Plans (Drawings)

Abstract :

Future bridge projects have the potential to benefit from the past 20 years of successfully completed projects. Using past designs for an accelerated and advanced starting point lends itself to a reduction in design time and fees. This proposed subset of standardized bridge plans is one means of implementing the Colorado Department of Transportation's (CDOT's) and the Federal Highway Administration's (FHWA's) mandates: EDC, accelerated bridge construction (ABC), and geosynthetic reinforcing steel (GRS)-IBS. Incidental benefits of using prefabricated bridge elements are maximizing design concepts and speed in construction that minimizes cost. GRS-IBS specifically minimizes the stiffness of bridge approaches and can correspondingly reduce differential settlement (bridge bumps). The objective of this study is to determine if the development of a standardized subset of bridge plans is feasible and cost-effective. The study should also determine what portion of the design type should be included as the standard plans and what type/range of bridges should be standardized

Group: Standards Category: Completed Projects

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