



DEPARTMENT OF TRANSPORTATION - STATE OF COLORADO CONTROL SURVEY DIAGRAM

Project MC 0403-018
US 40 MP 236.9 to MP 239.4
ROOSEVELT NATIONAL FOREST
GRAND COUNTY, COLORADO

AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID

FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO.	SHEET NUMBER
III	COLORADO	Project MC 0403-018	

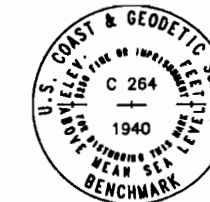
BERTHOUD PASS EROSION CONTROL

COORDINATE SUMMARY TABLE
(ADJUSTED FIELD DATA)

POINT NAME	GEODETIC COORDINATES NAD-83(92) (CHARN)		ELEVATION (NAVD 88)	MAPPING ANGLE	SCALE	NAD 83(92) ZONE 0502		PROJECT COORDINATES		PROJECT ELEV(m)	DESCRIPTION
	LATITUDE(N)	LONGITUDE(W)				NORTHING	EASTING	NORTH (m)	EAST (m)		
US 40 CM-MP 237.0 GPS PROJECT STATION	39°49'49.42851"	105°45'35.54788"	2981.238	-0°09'50.040"	1.000016895	526530.397	892154.999	526775.770	892570.780	2993.500	CDOT Type II Control Monument
US 40 CM-MP 237.2 GPS PROJECT STATION	39°50'01.88295"	105°45'29.46598"	3008.213	-0°09'46.204"	1.000017667	526914.110	892300.715	527159.862	892716.544	3018.482	CDOT Type II Control Monument
US 40 CM-MP 237.4 GPS PROJECT STATION	39°50'11.41374"	105°45'28.58430"	3023.134	-0°09'45.635"	1.000018260	527206.003	892322.990	527453.692	892738.829	3035.408	CDOT Type II Control Monument
US 40 CM-MP 237.6 GPS PROJECT STATION	39°50'21.81090"	105°45'28.13405"	3043.244	-0°09'45.364"	1.000018909	527528.639	892334.130	527774.477	892749.974	3055.519	CDOT Type II Control Monument
US 40 CM-MP 237.8 GPS PROJECT STATION	39°50'33.36360"	105°45'23.24637"	3068.379	-0°09'42.281"	1.000019633	527884.835	892451.347	528130.839	892867.246	3078.665	CDOT Type II Control Monument
US 40 CM-MP 238.0 GPS PROJECT STATION	39°50'41.11646"	105°45'25.48037"	3078.613	-0°09'43.678"	1.000020121	528123.902	892399.385	528370.018	892815.260	3090.907	CDOT Type II Control Monument
US 40 CM-MP 238.2 GPS PROJECT STATION	39°50'32.09696"	105°45'25.30573"	3086.209	-0°09'43.580"	1.000019554	527845.707	892402.275	528091.693	892818.151	3098.494	CDOT Type II Control Monument
US 40 CM-MP 238.3 GPS PROJECT STATION	39°50'26.47232"	105°45'29.62500"	3086.453	-0°09'46.304"	1.000018201	527672.519	892296.069	527918.424	892714.917	3108.748	CDOT Type II Control Monument
US 40 CM-MP 238.5 GPS PROJECT STATION	39°50'20.73247"	105°45'33.71014"	3105.431	-0°09'48.881"	1.000018842	527485.784	892201.456	527741.587	892617.239	3117.720	CDOT Type II Control Monument
US 40 CM-MP 238.7 GPS PROJECT STATION	39°50'09.80731"	105°45'36.64615"	3123.002	-0°09'50.732"	1.000018160	527159.004	892130.683	527404.670	892546.433	3135.286	CDOT Type II Control Monument
US 40 CM-MP 238.8 GPS PROJECT STATION	39°50'01.44365"	105°45'41.80281"	3139.840	-0°09'53.856"	1.000017640	526901.387	892012.088	527146.933	892427.782	3152.150	CDOT Type II Control Monument
US 40 CM-MP 239.1 GPS PROJECT STATION	39°49'53.95168"	105°45'48.34006"	3152.075	-0°09'58.108"	1.000017175	526670.778	891851.213	526916.216	892266.832	3164.385	CDOT Type II Control Monument
US 40 CM-MP 239.3								526738.400	892022.425	3178.700	CDOT Type II Control Monument

BASIS OF BEARINGS: Bearings used in the calculation of coordinates are based on a grid bearing of N 20°47'40" E from US-40 CM-MP 237.0 to US-40 CM-MP 237.2 as obtained from a Global Positioning System (GPS) survey based on the Colorado High Accuracy Reference Network (CHARN).

BASIS OF ELEVATIONS: Project is based on a U.S. Coast and Geodetic Survey (USCGS) benchmark C 264 1940 a 9 centimeter brass cap set on top of boulder with on NAVD '88 elevation of 2966.905m. C 264 1940 is part of Colorado Line 72, a first order second class line leveled in 1940. C 264 1940 is stamped as shown below.



NOT TO SCALE

COORDINATE DATUM: Coordinates are modified Colorado State Plane Central Zone NAD '83 coordinates. State Plane coordinates were modified to a mean project elevation of 3087.439m. The combined elevation/scale correction factor used to modify the coordinates was 0.999534198. The CHARN is based on the WGS '84 (92) datum.

NOTE: Refer to M-629-1 SURVEY MONUMENTS of the STANDARD PLANS, COLORADO DEPARTMENT OF TRANSPORTATION, M & S STANDARDS NOVEMBER 1992 for survey monument descriptions. Refer to M-100-1 STANDARD SYMBOLS of the STANDARD PLANS, COLORADO DEPARTMENT OF TRANSPORTATION, M & S STANDARDS NOVEMBER 1992 for standard symbol definitions.

NOTE: This control survey is for the use of Colorado Department of Transportation personnel. The survey is not a complete Boundary Survey. Title Policy, Title Commitment, and Title Research were not part of this control survey, therefore, easements, rights, and restrictions of record are not shown. The verification of the physical evidence with relation to easements, rights of way, property boundaries, and restrictions, as described in the instruments of record, were not included in this control survey.

NOTE: According to Colorado law you must commence any legal action based upon any defect in this survey within three years after you first discover such defect. In no event may any action based upon any defect in this survey be commenced more than ten years from the date of the statement shown.

SURVEYORS STATEMENT: I, Joseph P. Conway, a Professional Land Surveyor in the State of Colorado, hereby state that this Control Survey Diagram was prepared under my supervision this _____ day of _____, from a field survey performed under my supervision from April 23, 1993 to October 27, 1994, and checking for and on behalf of the Department of Transportation, State of Colorado, and is not a Land Survey Plat or Right-of-Way Survey Plat and to the best of my knowledge and belief this control survey, as shown, meets the minimum horizontal control tolerances of a Type B Survey and this topographic survey, as shown, meets the minimum horizontal control tolerances of a Type D Survey as listed in the Colorado Department of Transportation Survey Manual Chapter Three (Revised 4/29/92).

Joseph P. Conway L.S. 25618




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BERTHOUD PASS EROSION CONTROL

Map showing the location of Control Monuments (CM-MP) set by CDOT along Highway 40. The map includes a north arrow, a scale bar (0 to 50 meters), and a circular control monument cap symbol. The highway is shown with a dashed center line and solid edge lines, with mileposts (MP) marked. Arrows indicate directions 'To EMPIRE' and 'To WINTER PARK'. Several GPS project stations are marked with their coordinates (N, E, EL) and station numbers.

Legend:

- CM-MP - Control Monuments were set by CDOT. They were CDOT type 2

 CM-MP - Control Monuments were set by CDOT. They were CDOT type 2 monuments, a 3-1/4" dia. aluminum control monument cap (as shown) on a 3' X 3/4" dia. finned aluminum security rod on a 3' X 3/4" dia. smooth aluminum rod.



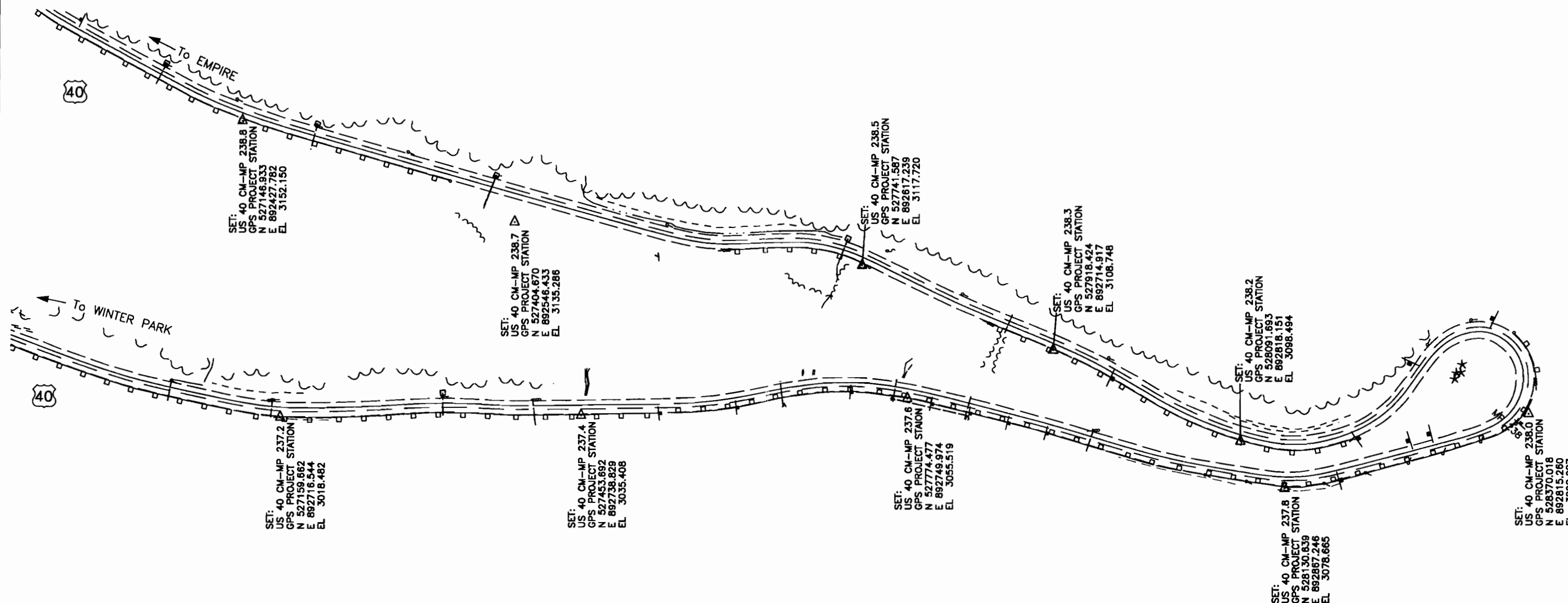
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Typical Control Monument Cap
NOT TO SCALE

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