

COLORADO DEPARTMENT OF TRANSPORTATION



Region 1
18500 E. Colfax Avenue
Aurora, CO 80011
Phone: (303) 757-9744 FAX: (303) 757-9746

Survey Unit: Joseph Conway

Sheet Revisions

mm/yy	XXXXX	XXX


INTERSTATE 70 MP 180.0 to MP 196.0

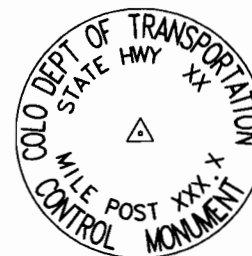
SITUATE IN THE WHITE RIVER NATIONAL FOREST
IN THE COUNTY OF SUMMIT AND THE COUNTY OF EAGLE,
STATE OF COLORADO.

Project Control Diagram

Title Sheet

Project Number: STA R100-104				
Project Location: INTERSTATE 70 - VAIL PASS				
Project Location: MILEPOST 180 TO MILEPOST 196				
Project Code:	Last Mod. Date	Subset Sheets	Sheet No.	Total No. of Sheets
14861	10-27-04	XXX of XXX	1	14

Prepared By:
 **MOUNTAIN SURVEYING & MAPPING, INC.**
8751 E. HAMPDEN AVE. SUITE B-1
DENVER, COLORADO 80231
(303) 306-1858



Typical Control
Monument Cap
Not to Scale

BASIS OF BEARINGS: All bearings are grid bearings of the Colorado State Plane Coordinate System, Central Zone, North American Datum 1983/92. The basis of grid bearing is the line between NSRS horizontal station "Vail Pass", a horizontal control disk set in a boulder, and I-70 CM-MP 190.00, a CDOT Type II monument. Said line bears N 37°40'07" E.

BASIS OF ELEVATIONS: Project is based on a elevation of 3234.238m on NSRS Station "VAIL PASS", a horizontal control disk set in a boulder. Elevations are relative to NAVD88. The control monuments from milepost 180.00 to 190.00 were tied in by means of running a closed bench loop.

COORDINATE DATUM: Coordinates on this project are for the exclusive use of the CDOT for the construction of this project and are considered Project Coordinates only.



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

NOTE: This control survey is for the use of the 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 restriction, 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.

NOTE: No guarantee as to the accuracy of the information contained on the attached drawing is either stated or implied unless this copy bears an original signature of the professional land surveyor hereon named.

SURVEYORS STATEMENT: I, Michael D. Heimbuck, a Professional Land Surveyor in the State of Colorado, hereby state that this Control Survey Diagram was prepared under my direct supervision this _____ day of _____, from a field survey performed under my supervision 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).

CONSTRUCTION SURVEYING AND MONUMENTATION REQUIREMENTS:

- 1). This Control Survey Diagram represents the horizontal and vertical control for the project established by the Division. It is possible that some of the survey control monuments listed have been disturbed or obliterated. It is the Contractor's responsibility to verify the existence and stability of the control monuments before submitting a bid price.
- 2). All Type 1 and Type 2 monuments shall be set flush with the ground. Witness posts shall be installed 1 foot from and facing all Type 1 and Type 2 monuments, or as directed by the Project Engineer.
- 3). Installation of Type 3 and Type 3-A monuments shall be completed in the same day that installation is commenced. Under no circumstances shall holes in the roadway be left open overnight.
- 4). When installing Type 3-A monuments, the aluminum access cover shall be positively secured to the PVC pipe with screws or glue. The access cover shall be caulked with asphalt caulking between the cover and the edges of the roadway surface to provide a positive moisture barrier around the access cover.

- 5). Control survey procedures, statistical analysis, and accuracy obtained for horizontal and vertical control shall be documented in the field book.
- 6). Legible copies of the field books shall be submitted to the Project Engineer for review on a monthly basis.
- 7). It is ultimately the prime Contractors responsibility to insure that these requirements, as well as any contained in the CDOT specifications, project special provisions, and CDOT Survey Manual are fulfilled under this contract.
- 8). The minimum staking intervals for each item are described on the plans or in the CDOT Survey Manual. If the contractor wishes to reduce the minimum intervals, a Contract Modification Order must be negotiated and the cost of the item reduced accordingly.

Michael D. Heimbuck PLS 17488

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INTERSTATE 70 MP 180.0 to MP 196.0

SITUATE IN THE WHITE RIVER NATIONAL FOREST
IN THE COUNTY OF SUMMIT AND THE COUNTY OF EAGLE,
STATE OF COLORADO.

Project Control Diagram

Monumentation Sheet

Project Number: STA R100-104

Project Location: INTERSTATE 70 - VAIL PASS

Project Location: MILEPOST 180 to MILEPOST 196

Project Code	Last Mod. Date	Subset Sheets	Sheet No.	Total No. of Sheets
14861	10-27-04	XXX of XXX	2	14

Prepared By:



**MOUNTAIN SURVEYING &
MAPPING, INC.**

8751 E. HAMPDEN AVE. SUITE B-1
DENVER, COLORADO 80231
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GEODETIC COORDINATE SUMMARY TABLE
(ADJUSTED FIELD DATA)

PROJECT COORDINATE SUMMARY TABLE
(ADJUSTED FIELD DATA)

POINT NAME	GEODETIC COORDINATES NAD-83(92) (CHARN)		ELLIP. (NAVD88)m	MAPPING ANGLE	SCALE	NAD 83(92) ZONE 0502	
	LATITUDE(N)	LONGITUDE(W)				NORTHING (m)	EASTING (m)
I-70 CM-MP 180.00	39° 38' 36.98336" N	106° 18' 17.62556" W	2550.723	-0° 30' 27.50218"	0.999980685	506065.426	845314.899
I-70 CM-MP 180.30	39° 38' 24.11894" N	106° 18' 00.07262" W	2586.230	-0° 30' 16.43172"	0.999980096	505665.000	845729.902
I-70 CM-MP 180.60	39° 38' 18.35358" N	106° 17' 48.80407" W	2596.886	-0° 30' 09.32477"	0.999979834	505484.840	845997.021
I-70 CM-MP 180.70	39° 38' 12.08107" N	106° 17' 42.08819" W	2598.430	-0° 30' 05.08913"	0.999979549	505289.997	846155.460
I-70 CM-MP 180.90	39° 38' 04.09649" N	106° 17' 30.98158" W	2587.487	-0° 29' 58.08431"	0.999979188	505041.446	846418.143
I-70 CM-MP 181.20	39° 37' 54.92789" N	106° 17' 18.60960" W	2596.943	-0° 29' 50.28142"	0.999978775	504756.128	846710.700
I-70 CM-MP 181.40	39° 37' 47.36386" N	106° 17' 05.46475" W	2602.783	-0° 29' 41.99110"	0.999978436	504520.145	847022.137
I-70 CM-MP 181.70	39° 37' 42.62646" N	106° 16' 48.32521" W	2622.432	-0° 29' 31.18138"	0.999978224	504370.527	847429.604
I-70 CM-MP 181.90	39° 37' 31.75849" N	106° 16' 39.91501" W	2638.234	-0° 29' 25.87715"	0.999977741	504033.648	847627.294
I-70 CM-MP 182.20	39° 37' 21.73985" N	106° 16' 41.93794" W	2651.057	-0° 29' 27.15299"	0.999977298	503725.095	847576.403
I-70 CM-MP 182.40	39° 37' 10.58319" N	106° 16' 44.76010" W	2675.415	-0° 29' 28.93290"	0.999976807	503381.611	847506.147
I-70 CM-MP 182.60	39° 37' 00.89282" N	106° 16' 46.32845" W	2696.472	-0° 29' 29.92204"	0.999976383	503083.090	847466.177
I-70 CM-MP 182.70	39° 36' 52.01765" N	106° 16' 45.19225" W	2711.302	-0° 29' 29.20545"	0.999975996	502809.156	847490.929
I-70 CM-MP 182.90	39° 36' 41.90301" N	106° 16' 40.63024" W	2718.836	-0° 29' 26.32824"	0.999975558	502496.298	847597.070
I-70 CM-MP 183.10	39° 36' 31.58792" N	106° 16' 37.36001" W	2738.806	-0° 29' 24.26574"	0.999975114	502177.523	847672.354
I-70 CM-MP 183.30	39° 36' 21.50499" N	106° 16' 32.78400" W	2757.984	-0° 29' 21.37970"	0.999974682	501865.643	847778.854
I-70 CM-MP 183.50	39° 36' 11.46503" N	106° 16' 27.58867" W	2772.036	-0° 29' 18.10306"	0.999974254	501554.964	847900.149
I-70 CM-MP 183.70	39° 36' 02.90022" N	106° 16' 21.41158" W	2783.835	-0° 29' 14.20723"	0.999973892	501289.580	848045.261
I-70 CM-MP 183.90	39° 35' 55.06316" N	106° 16' 14.59087" W	2798.059	-0° 29' 09.90548"	0.999973561	501046.511	848205.930
I-70 CM-MP 184.10	39° 35' 47.83918" N	106° 16' 04.39304" W	2801.428	-0° 29' 03.47382"	0.999973258	500821.672	848447.340
I-70 CM-MP 184.30	39° 35' 42.70883" N	106° 15' 50.82465" W	2802.047	-0° 28' 54.91638"	0.999973043	500660.728	848769.724
I-70 CM-MP 184.50	39° 35' 41.28130" N	106° 15' 36.41880" W	2813.434	-0° 28' 45.83076"	0.999972993	500613.821	849113.057
I-70 CM-MP 184.70	39° 35' 41.20541" N	106° 15' 21.03201" W	2837.234	-0° 28' 36.12647"	0.999972980	500608.418	849480.146
I-70 CM-MP 185.00	39° 35' 40.47255" N	106° 15' 05.30526" W	2863.088	-0° 28' 26.20777"	0.999972949	500582.704	849855.178
I-70 CM-MP 185.20	39° 35' 34.22923" N	106° 14' 51.71330" W	2889.185	-0° 28' 17.63547"	0.999972689	500387.491	850177.881
I-70 CM-MP 185.40	39° 35' 23.93223" N	106° 14' 40.40585" W	2915.559	-0° 28' 10.50398"	0.999972262	500067.727	850445.066
I-70 CM-MP 185.70	39° 35' 12.17134" N	106° 14' 45.42687" W	2941.477	-0° 28' 13.67068"	0.999971777	499706.018	850322.285
I-70 CM-MP 185.90	39° 35' 00.87911" N	106° 14' 49.66270" W	2969.592	-0° 28' 16.34217"	0.999971315	499358.609	850218.348
I-70 CM-MP 186.00	39° 34' 52.54633" N	106° 14' 55.48381" W	2990.960	-0° 28' 20.01348"	0.999970976	499102.780	850077.324
I-70 CM-MP 186.20	39° 34' 41.62770" N	106° 14' 58.32279" W	3008.035	-0° 28' 21.80400"	0.999970534	498766.622	850006.799
I-70 CM-MP 186.50	39° 34' 31.74107" N	106° 14' 52.43771" W	3024.245	-0° 28' 18.09234"	0.999970136	498460.573	850144.732
I-70 CM-MP 186.70	39° 34' 23.83772" N	106° 14' 43.38236" W	3039.007	-0° 28' 12.38122"	0.999969820	498215.068	850358.840
I-70 CM-MP 186.90	39° 34' 15.61568" N	106° 14' 33.46672" W	3056.573	-0° 28' 06.12753"	0.999969492	497959.573	850593.414
I-70 CM-MP 187.00	39° 34' 07.52232" N	106° 14' 24.84004" W	3075.892	-0° 28' 00.68678"	0.999969171	497708.303	850797.271
I-70 CM-MP 187.20	39° 33' 59.06528" N	106° 14' 17.29937" W	3098.146	-0° 27' 55.93096"	0.999968838	497446.035	850975.129
I-70 CM-MP 187.40	39° 33' 49.31047" N	106° 14' 07.55483" W	3113.549	-0° 27' 49.78518"	0.999968455	497143.323	851205.280
I-70 CM-MP 187.60	39° 33' 40.58296" N	106° 14' 01.53808" W	3133.658	-0° 27' 45.99048"	0.999968114	496873.018	851346.721
I-70 CM-MP 187.80	39° 33' 31.72002" N	106° 13' 55.91370" W	3150.028	-0° 27' 42.44324"	0.999967770	496598.613	851478.772
I-70 CM-MP 187.90	39° 33' 27.40368" N	106° 13' 47.92756" W	3159.945	-0° 27' 37.40647"	0.999967603	496463.970	851668.339
I-70 CM-MP 188.20	39° 33' 18.57349" N	106° 13' 38.67750" W	3160.228	-0° 27' 31.57255"	0.999967263	496189.888	851886.970
I-70 CM-MP 188.50	39° 33' 07.23741" N	106° 13' 28.18964" W	3177.776	-0° 27' 24.95796"	0.999966830	495838.298	852134.550
I-70 CM-MP 188.70	39° 32' 58.89789" N	106° 13' 19.74475" W	3181.408	-0° 27' 19.63186"	0.999966513	495579.514	852334.113
I-70 CM-MP 188.90	39° 32' 50.51322" N	106° 13' 11.66294" W	3194.568	-0° 27' 14.53475"	0.999966195	495319.412	852525.009

POINT NAME	PROJECT COORDINATES		ELEV(ft)	DESCRIPTION
	NORTH (ft)	EAST (ft)		
I-70 CM-MP 180.00	1333053.58	2118541.32	8409.55	SET CDOT TYPE II
I-70 CM-MP 180.30	1331739.20	2119903.55	8525.72	SET CDOT TYPE II
I-70 CM-MP 180.60	1331147.83	2120780.35	8560.98	SET CDOT TYPE II
I-70 CM-MP 180.70	1330508.27	2121300.42	8565.72	SET CDOT TYPE II
I-70 CM-MP 180.90	1329692.41	2122162.67	8530.12	SET CDOT TYPE II
I-70 CM-MP 181.20	1328755.86	2123122.97	8560.81	SET CDOT TYPE II
I-70 CM-MP 181.40	1327981.26	2124145.25	8580.28	SET CDOT TYPE II
I-70 CM-MP 181.70	1327490.15	2125482.74	8644.41	SET CDOT TYPE II
I-70 CM-MP 181.90	1326384.36	2126131.65	8696.60	SET CDOT TYPE II
I-70 CM-MP 182.20	1325371.55	2125964.60	8738.69	SET CDOT TYPE II
I-70 CM-MP 182.40	1324244.07	2125733.99	8818.31	SET CDOT TYPE II
I-70 CM-MP 182.60	1323264.19	2125602.79	8887.72	SET CDOT TYPE II
I-70 CM-MP 182.70	1322365.02	2125684.04	8936.04	SET CDOT TYPE II
I-70 CM-MP 182.90	1321338.07	2126032.44	8961.06	SET CDOT TYPE II
I-70 CM-MP 183.10	1320291.71	2126279.56	9026.29	SET CDOT TYPE II
I-70 CM-MP 183.30	1319267.98	2126629.14	9089.53	SET CDOT TYPE II
I-70 CM-MP 183.50	1318248.19	2127027.28	9135.34	SET CDOT TYPE II
I-70 CM-MP 183.70	1317377.08	2127503.61	9174.35	SET CDOT TYPE II
I-70 CM-MP 183.90	1316579.21	2128030.99	9220.69	SET CDOT TYPE II
I-70 CM-MP 184.10	1315841.19	2128823.41	9232.05	SET CDOT TYPE II
I-70 CM-MP 184.30	1315312.90	2129881.62	9233.75	SET CDOT TYPE II
I-70 CM-MP 184.50	1315158.93	2131008.60	9271.43	SET CDOT TYPE II
I-70 CM-MP 184.70	1315141.19	2132213.55	9349.23	SET CDOT TYPE II
I-70 CM-MP 185.00	1315056.79	2133444.58	9434.38	SET CDOT TYPE II
I-70 CM-MP 185.20	1314416.01	2134503.83	9519.68	SET CDOT TYPE II
I-70 CM-MP 185.40	1313366.40	2135380.86	9606.52	SET CDOT TYPE II
I-70 CM-MP 185.70	1312179.10	2134977.84	9691.26	SET CDOT TYPE II
I-70 CM-MP 185.90	1311038.75	2134636.67	9783.84	SET CDOT TYPE II
I-70 CM-MP 186.00	1310199.00	2134173.76	9853.63	SET CDOT TYPE II
I-70 CM-MP 186.20	1309095.58	2133942.27	9909.96	SET CDOT TYPE II
I-70 CM-MP 186.50	1308090.99	2134395.02	9962.83	SET CDOT TYPE II
I-70 CM-MP 186.70	1307285.13	2135097.83	10011.57	SET CDOT TYPE II
I-70 CM-MP 186.90	1306446.48	2135867.80	10068.89	SET CDOT TYPE II
I-70 CM-MP 187.00	1305621.70	2136536.96	10132.58	SET CDOT TYPE II
I-70 CM-MP 187.20	1304760.81	2137120.77	10205.31	SET CDOT TYPE II
I-70 CM-MP 187.40	1303767.18	2137876.23	10256.15	SET CDOT TYPE II
I-70 CM-MP 187.60	1302879.91	2138340.50	10321.82	SET CDOT TYPE II
I-70 CM-MP 187.80	1301979.19	2138773.95	10375.87	SET CDOT TYPE II
I-70 CM-MP 187.90	1301537.23	2139396.20	10408.10	SET CDOT TYPE II
I-70 CM-MP 188.20	1300637.57	2140113.84	10409.03	SET CDOT TYPE II
I-70 CM-MP 188.50	1299483.49	2140926.51	10466.60	SET CDOT TYPE II
I-70 CM-MP 188.70	1298634.04	2141581.57	10478.52	SET CDOT TYPE II
I-70 CM-MP 188.90	1297780.27	2142208.18	10521.70	SET CDOT TYPE II

PROJECT COORDINATE CONVERSION PARAMETERS

Project Latitude: 39° 34' 16.95715"
Project Longitude: 106° 14' 23.78035"
Project Elevation: 2955.1258m
State Plane Zone: Colorado Central
Scale Factor: 0.9999695454
Combined Scale Factor: 0.9995060071
Northing Reduction: 100000
Easting Reduction: 200000
Units are METERS.

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INTERSTATE 70 MP 180.0 to MP 196.0

SITUATE IN THE WHITE RIVER NATIONAL FOREST
IN THE COUNTY OF SUMMIT AND THE COUNTY OF EAGLE,
STATE OF COLORADO.

Project Control Diagram

Monumentation Sheet

Project Number: STA R100-104				
Project Location: INTERSTATE 70 - VAIL PASS				
Project Location: MILEPOST 180 TO MILEPOST 196				
Project Code: 14861	Last Mod. Date: 10-27-04	Subset Sheets: XXX of XXX	Sheet No.: 3	Total No. of Sheets: 14

Prepared By:

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GEODETIC COORDINATE SUMMARY TABLE
(ADJUSTED FIELD DATA)

POINT NAME	GEODETIC COORDINATES NAD-83(92) (CHARN)		ELLIP. (NAVD88)m	MAPPING ANGLE	SCALE	NAD 83(92) ZONE 0502	
	LATITUDE(N)	LONGITUDE(W)				NORTHING (m)	EASTING (m)
I-70 CM-MP 189.10	39° 32' 40.55422" N	106° 13' 08.51097" W	3215.687	-0° 27' 12.54683"	0.999965821	495011.695	852597.831
I-70 CM-MP 189.20	39° 32' 34.13551" N	106° 13' 02.05422" W	3232.317	-0° 27' 08.47463"	0.999965580	494812.533	852750.428
I-70 CM-MP 189.40	39° 32' 25.17198" N	106° 12' 54.92734" W	3245.911	-0° 27' 03.97978"	0.999965247	494534.770	852918.416
I-70 CM-MP 189.60	39° 32' 15.01804" N	106° 12' 51.94728" W	3233.984	-0° 27' 02.10029"	0.999964871	494221.078	852987.109
I-70 CM-MP 189.80	39° 32' 02.88219" N	106° 12' 54.33493" W	3216.760	-0° 27' 03.60615"	0.999964425	493847.276	852927.150
I-70 CM-MP 190.00	39° 31' 51.18273" N	106° 12' 56.16997" W	3218.808	-0° 27' 04.76349"	0.999963998	493486.828	852880.489
I-70 CM-1	39° 31' 40.17922" N	106° 13' 05.70582" W	3211.724	-0° 27' 10.77766"	0.999963599	493149.295	852650.086
I-70 CM-2	39° 31' 38.04352" N	106° 13' 06.03398" W	3209.529	-0° 27' 10.98462"	0.999963522	493083.496	852641.728
NSRS VAIL PASS	39° 31' 44.04349" N	106° 13' 03.17196" W	3221.780	-0° 27' 09.17957"	0.999963739	493267.985	852711.539
NSRS HEID	39° 30' 06.31578" N	106° 08' 25.72693" W	2951.220	-0° 24' 14.19789"	0.999960317	490204.692	859316.007
NSRS R 448	39° 30' 36.41211" N	106° 08' 30.93025" W	2938.074	-0° 24' 17.47957"	0.999961347	491133.690	859198.256
NSRS Q 448	39° 30' 09.87897" N	106° 09' 10.47344" W	2956.303	-0° 24' 42.41905"	0.999960437	490322.184	858247.782
NSRS J 448	39° 30' 00.50644" N	106° 09' 47.50562" W	2978.397	-0° 25' 05.77486"	0.999960120	490039.560	857360.970
NSRS G 448	39° 30' 08.51167" N	106° 10' 16.92428" W	3001.366	-0° 25' 24.32890"	0.999960391	490291.590	856659.954
NSRS H 448	39° 30' 14.48281" N	106° 10' 44.93767" W	3025.358	-0° 25' 41.99665"	0.999960594	490480.704	855992.085
NSRS DD-VP 13.0	39° 30' 16.47408" N	106° 10' 49.97667" W	3028.923	-0° 25' 45.17470"	0.999960662	490543.012	855872.165
NSRS L 448	39° 30' 35.10636" N	106° 12' 09.04062" W	3111.185	-0° 26' 35.03950"	0.999961301	491131.976	853987.817
NSRS M 448	39° 30' 50.44423" N	106° 12' 19.98298" W	3120.682	-0° 26' 41.94074"	0.999961834	491606.995	853730.103
NSRS P 448	39° 31' 30.08564" N	106° 12' 58.20441" W	3190.893	-0° 27' 06.04659"	0.999963236	492836.612	852826.777
NSRS MCLAURIN	39° 37' 30.43663" N	106° 16' 37.48236" W	2657.700	-0° 29' 24.34291"	0.999977682	503992.387	847684.959
NSRS WOODMAN	39° 37' 11.80292" N	106° 28' 08.00530" W	2318.630	-0° 36' 39.84851"	0.999976860	503576.002	831211.182

PROJECT COORDINATE SUMMARY TABLE
(ADJUSTED FIELD DATA)

POINT NAME	PROJECT COORDINATES		ELEV(ft)	DESCRIPTION
	NORTH (ft)	EAST (ft)		
I-70 CM-MP 189.10	1296770.20	2142447.21	10591.01	SET CDOT TYPE II
I-70 CM-MP 189.20	1296116.46	2142948.11	10645.58	SET CDOT TYPE II
I-70 CM-MP 189.40	1295204.72	2143499.52	10690.20	SET CDOT TYPE II
I-70 CM-MP 189.60	1294175.04	2143725.00	10651.05	SET CDOT TYPE II
I-70 CM-MP 189.80	1292948.05	2143528.19	10594.52	SET CDOT TYPE II
I-70 CM-MP 190.00	1291764.90	2143375.02	10601.24	SET CDOT TYPE II
I-70 CM-1	1290656.96	2142618.74	10577.99	FOUND CDOT TYPE II
I-70 CM-2	1290440.97	2142591.30	10570.79	FOUND CDOT TYPE II
NSRS VAIL PASS	1291046.55	2142820.45	10611.00	FOUND NGS HORZ DISK
NSRS HEID	1280991.43	2164499.32	9723.55	FOUND NGS 3-D ROD
NSRS R 448	1284040.83	2164112.81	9680.55	FOUND NGS VERT DISK
NSRS Q 448	1281377.09	2160992.92	9740.09	FOUND NGS VERT DISK
NSRS J 448	1280449.39	2158082.00	9812.60	FOUND NGS VERT DISK
NSRS G 448	1281276.67	2155780.95	9888.03	FOUND NGS VERT DISK
NSRS H 448	1281897.43	2153588.70	9966.75	FOUND NGS 3-D ROD
NSRS DD-VP 13.0	1282101.95	2153195.07	9978.45	FOUND SURVEY DISK
NSRS L 448	1284035.20	2147009.78	10248.06	FOUND NGS VERT DISK
NSRS M 448	1285594.43	2146163.84	10279.23	FOUND NGS VERT DISK
NSRS P 448	1289630.59	2143198.72	10509.69	FOUND NGS VERT DISK
NSRS MCLAURIN	1326248.92	2126320.93	8759.50	FOUND NGS HORZ DISK
NSRS WOODMAN	1324882.15	2072246.50	7648.74	FOUND NGS HORZ DISK

THE FOLLOWING POINTS WERE NOT INCLUDED IN THE GPS NETWORK.
THEY WERE TIED IN AS SIDE SHOTS USING GPS FAST STATIC METHODS.

POINT NAME	GEODETIC COORDINATES NAD-83(92) (CHARN)		ELLIP. (NAVD88)m	MAPPING ANGLE	SCALE	NAD 83(92) ZONE 0502	
	LATITUDE(N)	LONGITUDE(W)				NORTHING (m)	EASTING (m)
NSRS K 448	39° 30' 19.90279" N	106° 11' 38.03610" W	3066.817	-0° 26' 15.48528"	0.999960779	490657.433	854724.860
NSRS N 448	39° 31' 09.56376" N	106° 12' 47.54999" W	3158.395	-0° 26' 59.32696"	0.999962506	492201.750	853076.261

POINT NAME	PROJECT COORDINATES		ELEV(ft)	DESCRIPTION
	NORTH (ft)	EAST (ft)		
NSRS K 448	1282477.53	2149429.09	10102.78	FOUND NGS VERT DISK
NSRS N 448	1287546.68	2144017.64	10403.35	FOUND NGS VERT DISK

PROJECT COORDINATE CONVERSION PARAMETERS

Project Latitude: 39°34'16.95715"
Project Longitude: 106°14'23.78035"
Project Elevation: 2955.1258m
State Plane Zone: Colorado Central
Scale Factor: 0.9999695454
Combined Scale Factor: 0.9995060071
Northing Reduction: 100000
Easting Reduction: 200000
Units are METERS.

THE FOLLOWING POINTS WERE NOT INCLUDED IN THE GPS NETWORK.
THEY WERE TIED IN AS SIDE SHOTS USING RTK-GPS METHODS.

POINT NAME	PROJECT COORDINATES		ELEV(ft)	DESCRIPTION
	NORTH (ft)	EAST (ft)		
I-70 CM-MP 185.27	1313735.87	2135237.63	9563.60	SET REBAR & CAP
I-70 CM-MP 185.28	1313692.54	2135079.68	9544.47	SET REBAR & CAP
I-70 CM-MP 185.51	1313014.43	2135206.53	9616.25	SET REBAR & CAP

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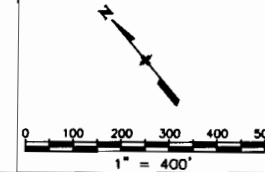
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Sheet Revisions

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INTERSTATE 70 MP 180.0 to MP 196.0

SITUATE IN THE WHITE RIVER NATIONAL FOREST
IN THE COUNTY OF SUMMIT AND THE COUNTY OF EAGLE,
STATE OF COLORADO.



Project Control Diagram

Plan Sheet

Project Number: STA R100-104

Project Location: INTERSTATE 70 - VAIL PASS

Project Location: MILEPOST 180 TO MILEPOST 196

Project Code	Last Mod. Date	Subset Sheets	Sheet No.	Total No. of Sheets
14861	10-27-04	XXX of XXX	4	14



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SET
I-70 CM-MP 180.00
CDOT TYPE II
N: 1333053.58
E: 2118541.32
EL:8409.55

SET
I-70 CM-MP 180.60
CDOT TYPE II
N: 1331147.83
E: 2120780.35
EL:8560.98

SET
I-70 CM-MP 180.30
CDOT TYPE II
N: 1331739.20
E: 2119903.55
EL:8525.72

SET
I-70 CM-MP 180.70
CDOT TYPE II
N: 1330508.27
E: 2121300.42
EL:8565.72

SET
I-70 CM-MP 180.90
CDOT TYPE II
N: 1329692.41
E: 2122162.67
EL:8530.12

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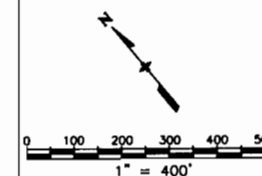
Survey Unit: Joseph Conway

Sheet Revisions

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INTERSTATE 70 MP 180.0 to MP 196.0

SITUATE IN THE WHITE RIVER NATIONAL FOREST
IN THE COUNTY OF SUMMIT AND THE COUNTY OF EAGLE,
STATE OF COLORADO.



Project Control Diagram

Plan Sheet

Project Number: STA R100-104

Project Location: INTERSTATE 70 - VAIL PASS

Project Location: MILEPOST 180 TO MILEPOST 196

Project Code	Last Mod. Date	Subset Sheets	Sheet No.	Total No. of Sheets
14861	10-27-04	XXX of XXX	5	14

Prepared By:



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SET
I-70 CM-MP 181.70
CDOT TYPE II
N: 1327490.15
E: 2125482.74
EL:8644.41

FOUND
MCLAURIN
NGS HORZ DISK
N: 1326248.92
E: 2126320.93
EL:8759.50

SET
I-70 CM-MP 181.90
CDOT TYPE II
N: 1326384.36
E: 2126131.65
EL:8696.60

27
1
8
1
.98

SET
I-70 CM-MP 180.90
CDOT TYPE II
N: 1329692.41
E: 2122162.67
EL:8530.12

SET
I-70 CM-MP 181.20
CDOT TYPE II
N: 1328755.86
E: 2123122.97
EL:8560.81

SET
I-70 CM-MP 181.40
CDOT TYPE II
N: 1327981.26
E: 2124145.25
EL:8580.28

SET
I-70 CM-MP 182.20
CDOT TYPE II
N: 1325371.55
E: 2125964.60
EL:8738.69

NO
S
I
G
N

26
1
8
2
.16

27
1
8
1
.98

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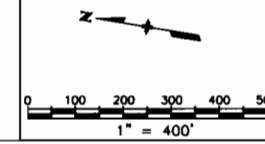
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Sheet Revisions

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INTERSTATE 70 MP 180.0 to MP 196.0
SITUATE IN THE WHITE RIVER NATIONAL FOREST
IN THE COUNTY OF SUMMIT AND THE COUNTY OF EAGLE,
STATE OF COLORADO.



Project Control Diagram

Plan Sheet

Project Number: STA R100-104				
Project Location: INTERSTATE 70 - VAIL PASS				
Project Location: MILEPOST 180 TO MILEPOST 196				
Project Code:	Last Mod. Date	Subset Sheets	Sheet No.	Total No. of Sheets
14861	10-27-04	XXX of XXX	6	14

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SET

I-70 CM-MP 182.20

CDOT TYPE II

N: 1325371.55

E: 2125964.60

EL:8738.69

26
1
8
2
.16

NO
SIGN

SET

I-70 CM-MP 182.40

CDOT TYPE II

N: 1324244.07

E: 2125733.99

EL:8818.31

SET

I-70 CM-MP 182.60

CDOT TYPE II

N: 1323264.19

E: 2125602.79

EL:8887.72

SET

I-70 CM-MP 182.90

CDOT TYPE II

N: 1321338.07

E: 2126032.44

EL:8961.06

25
1
8
2
.93

SET

I-70 CM-MP 182.70

CDOT TYPE II

N: 1322365.02

E: 2125684.04

EL:8936.04

30
1
8
2
.94

SET

I-70 CM-MP 183.10

CDOT TYPE II

N: 1320291.71

E: 2126279.56

EL:9026.29

27
1
8
1
.98

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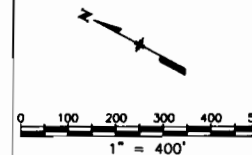
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Sheet Revisions

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INTERSTATE 70 MP 180.0 to MP 196.0

SITUATE IN THE WHITE RIVER NATIONAL FOREST
IN THE COUNTY OF SUMMIT AND THE COUNTY OF EAGLE,
STATE OF COLORADO.



Project Control Diagram

Plan Sheet

Project Number: STA R100-104

Project Location: INTERSTATE 70 - VAIL PASS

Project Location: MILEPOST 180 TO MILEPOST 196

Project Code	Last Mod. Date	Subset Sheets	Sheet No.	Total No. of Sheets
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SET
I-70 CM-MP 183.10
CDOT TYPE II
N: 1320291.71
E: 2126279.56
EL:9026.29

SET
I-70 CM-MP 183.30
CDOT TYPE II
N: 1319267.98
E: 2126629.14
EL:9089.53

SET
I-70 CM-MP 183.50
CDOT TYPE II
N: 1318248.19
E: 2127027.28
EL:9135.34

SET
I-70 CM-MP 183.70
CDOT TYPE II
N: 1317377.08
E: 2127503.61
EL:9174.35

SET
I-70 CM-MP 183.90
CDOT TYPE II
N: 1316579.21
E: 2128030.99
EL:9220.69

SET
I-70 CM-MP 184.10
CDOT TYPE II
N: 1315841.19
E: 2128823.41
EL:9232.05

NO
SIGN

23
1
8
3
.62

27
1
8
1
.98

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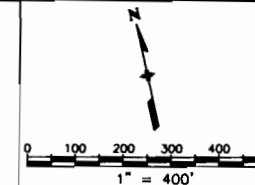
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Sheet Revisions

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INTERSTATE 70 MP 180.0 to MP 196.0

SITUATE IN THE WHITE RIVER NATIONAL FOREST
IN THE COUNTY OF SUMMIT AND THE COUNTY OF EAGLE,
STATE OF COLORADO.



Project Control Diagram

Plan Sheet

Project Number: STA R100-104

Project Location: INTERSTATE 70 - VAIL PASS

Project Location: MILEPOST 180 TO MILEPOST 196

Project Code	Last Mod. Date	Subset Sheets	Sheet No.	Total No. of Sheets
14861	10-27-04	XXX of XXX	8	14

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SET
I-70 CM-MP 184.10
CDOT TYPE II
N: 1315841.19
E: 2128823.41
EL:9232.05

22
1
8
4
.34

SET
I-70 CM-MP 184.30
CDOT TYPE II
N: 1315312.90
E: 2129881.62
EL:9233.75

21
1
8
4
.62

SET
I-70 CM-MP 184.50
CDOT TYPE II
N: 1315158.93
E: 2131008.60
EL:9271.43

NO
SIGN

32
1
8
4
.89

SET
I-70 CM-MP 184.70
CDOT TYPE II
N: 1315141.19
E: 2132213.55
EL:9349.23

SET
I-70 CM-MP 185.00
CDOT TYPE II
N: 1315056.79
E: 2133444.58
EL:9434.38

20
1
8
5
.02

NO
SIGN

27
1
8
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.98

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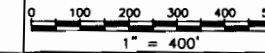
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Sheet Revisions

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INTERSTATE 70 MP 180.0 to MP 196.0

SITUATE IN THE WHITE RIVER NATIONAL FOREST
IN THE COUNTY OF SUMMIT AND THE COUNTY OF EAGLE,
STATE OF COLORADO.



Project Control Diagram

Plan Sheet

Project Number: STA R100-104

Project Location: INTERSTATE 70 - VAIL PASS

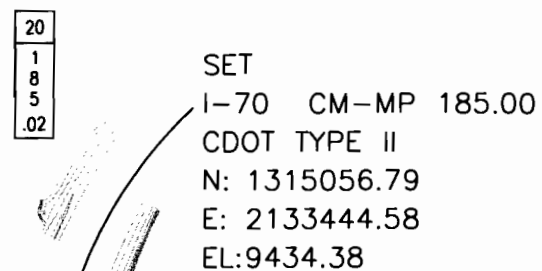
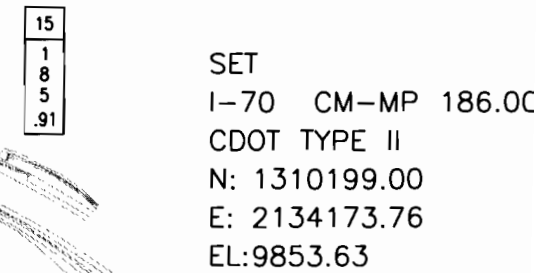
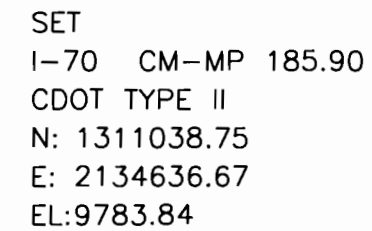
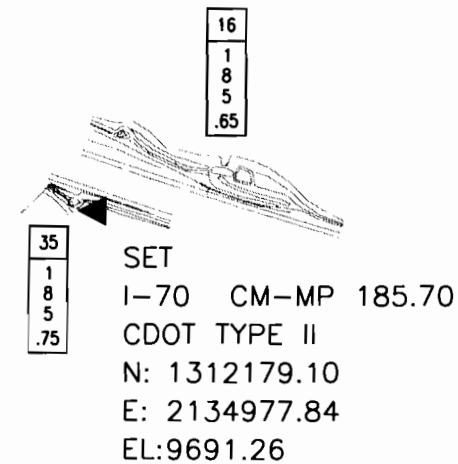
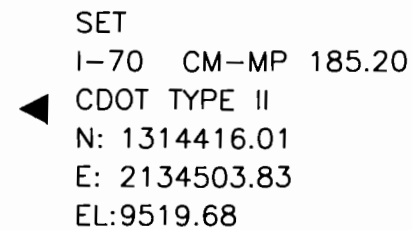
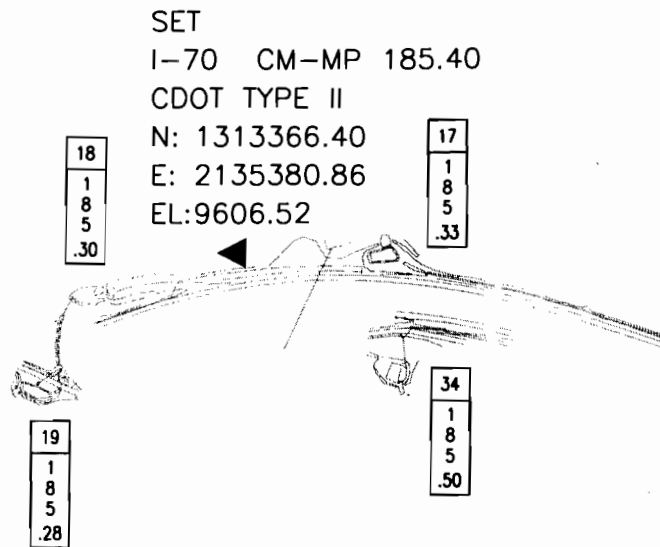
Project Location: MILEPOST 180 TO MILEPOST 196

Project Code	Last Mod. Date	Subset Sheets	Sheet No.	Total No. of Sheets
14861	10-27-04	XXX of XXX	9	14



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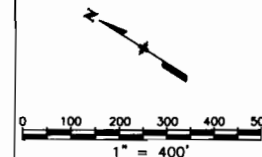
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Sheet Revisions

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INTERSTATE 70 MP 180.0 to MP 196.0

SITUATE IN THE WHITE RIVER NATIONAL FOREST
IN THE COUNTY OF SUMMIT AND THE COUNTY OF EAGLE,
STATE OF COLORADO.



Project Control Diagram

Plan Sheet

Project Number: STA R100-104				
Project Location: INTERSTATE 70 - VAIL PASS				
Project Location: MILEPOST 180 TO MILEPOST 196				
Project Code:	Last Mod. Date	Subset Sheets	Sheet No.	Total No. of Sheets
14861	10-27-04	XXX of XXX	10	14

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15
1
8
5
.91

SET
I-70 CM-MP 186.00
CDOT TYPE II
N: 1310199.00
E: 2134173.76
EL: 9853.63

37
8
5
.98

SET
I-70 CM-MP 186.20
CDOT TYPE II
N: 1309095.58
E: 2133942.27
EL: 9909.96

SET
I-70 CM-MP 186.50
CDOT TYPE II
N: 1308090.99
E: 2134395.02
EL: 9962.83

SET
I-70 CM-MP 186.70
CDOT TYPE II
N: 1307285.13
E: 2135097.83
EL: 10011.57

SET
I-70 CM-MP 186.90
CDOT TYPE II
N: 1306446.48
E: 2135867.80
EL: 10068.89

13
1
8
6
.95

12
1
8
7
.00

11
1
8
7
.07

10
1
8
7
.13

30
1
8
6
.99

SET
I-70 CM-MP 187.00
CDOT TYPE II
N: 1305621.70
E: 2136536.96
EL: 10132.58

27
1
8
1
.98

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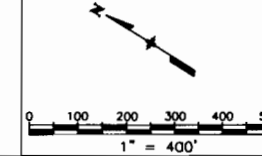
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Sheet Revisions

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INTERSTATE 70 MP 180.0 to MP 196.0

SITUATE IN THE WHITE RIVER NATIONAL FOREST
IN THE COUNTY OF SUMMIT AND THE COUNTY OF EAGLE,
STATE OF COLORADO.

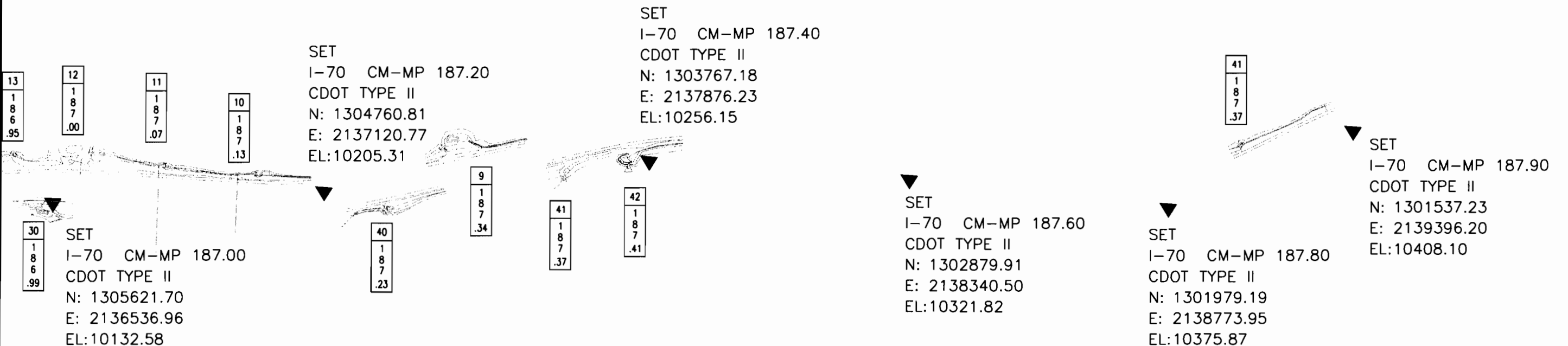


Project Control Diagram

Plan Sheet

Project Number: STA R100-104				
Project Location: INTERSTATE 70 - VAIL PASS				
Project Location: MILEPOST 180 TO MILEPOST 196				
Project Code:	Last Mod. Date	Subset Sheets	Sheet No.	Total No. of Sheets
14861	10-27-04	XXX of XXX	11	14

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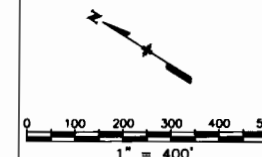
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Sheet Revisions

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INTERSTATE 70 MP 180.0 to MP 196.0

SITUATE IN THE WHITE RIVER NATIONAL FOREST
IN THE COUNTY OF SUMMIT AND THE COUNTY OF EAGLE,
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Project Control Diagram

Plan Sheet

Project Number: STA R100-104				
Project Location: INTERSTATE 70 - VAIL PASS				
Project Location: MILEPOST 180 TO MILEPOST 196				
Project Code:	Last Mod. Date	Subset Sheets	Sheet No.	Total No. of Sheets
14861	10-27-04	XXX of XXX	12	14

Prepared By:



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SET
I-70 CM-MP 188.20
CDOT TYPE II
N: 1300637.57
E: 2140113.84
EL:10409.03

7
1
8
8
.33

NO
SIGN

NO
SIGN

44
1
8
8
.42

SET
I-70 CM-MP 188.50
CDOT TYPE II
N: 1299483.49
E: 2140926.51
EL:10466.60

6
1
8
8
.73

6
1
8
8
.73

SET
I-70 CM-MP 188.70
CDOT TYPE II
N: 1298634.04
E: 2141581.57
EL:10478.52

SET
I-70 CM-MP 188.90
CDOT TYPE II
N: 1297780.27
E: 2142208.18
EL:10521.70

5
1
8
9
.09

NO
SIGN

SET
I-70 CM-MP 189.10
CDOT TYPE II
N: 1296770.20
E: 2142447.21
EL:10591.01

27
1
8
1
.98

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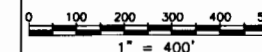
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Sheet Revisions

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INTERSTATE 70 MP 180.0 to MP 196.0

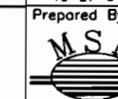
SITUATE IN THE WHITE RIVER NATIONAL FOREST
IN THE COUNTY OF SUMMIT AND THE COUNTY OF EAGLE,
STATE OF COLORADO.



Project Control Diagram

Plan Sheet

Project Number:	STA R100-104
Project Location:	INTERSTATE 70 - VAIL PASS
Project Location:	MILEPOST 180 TO MILEPOST 196
Project Code:	14861
Last Mod. Date:	10-27-04
Subset Sheets:	XXX of XXX
Sheet No.:	13
Total No. of Sheets:	14



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SET
I-70 CM-MP 188.90
CDOT TYPE II
N: 1297780.27
E: 2142208.18
EL:10521.70

NO
S
I
G
N

SET
I-70 CM-MP 189.10
CDOT TYPE II
N: 1296770.20
E: 2142447.21
EL:10591.01

SET
I-70 CM-MP 189.20
CDOT TYPE II
N: 1296116.46
E: 2142948.11
EL:10645.58

SET
I-70 CM-MP 189.40
CDOT TYPE II
N: 1295204.72
E: 2143499.52
EL:10690.20

SET
I-70 CM-MP 189.60
CDOT TYPE II
N: 1294175.04
E: 2143725.00
EL:10651.05

SET
I-70 CM-MP 189.80
CDOT TYPE II
N: 1292948.05
E: 2143528.19
EL:10594.52

27
1
8
1
.98

= POND IDENTIFICATION SIGN

COLORADO DEPARTMENT OF TRANSPORTATION



Region 1
18500 E. Colfax Avenue
Aurora, CO 80011
Phone: (303) 757-9744 FAX: (303) 757-9746

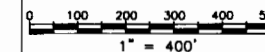
Survey Unit: Joseph Conway

Sheet Revisions

mm/yy	xxxxx	xxx

INTERSTATE 70 MP 180.0 to MP 196.0

SITUATE IN THE WHITE RIVER NATIONAL FOREST
IN THE COUNTY OF SUMMIT AND THE COUNTY OF EAGLE,
STATE OF COLORADO.



Project Control Diagram

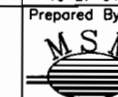
Plan Sheet

Project Number: STA R100-104

Project Location: INTERSTATE 70 - VAIL PASS

Project Location: MILEPOST 180 TO MILEPOST 196

Project Code:	Last Mod. Date	Subset Sheets	Sheet No.	Total No. of Sheets
14861	10-27-04	XXX of XXX	14	14



**MOUNTAIN SURVEYING &
MAPPING, INC.**

8751 E. HAMPODEN AVE. SUITE B-1
DENVER, COLORADO 80231
(303) 306-1858



SET

I-70 CM-MP 189.80

CDOT TYPE II

N: 1292948.05

E: 2143528.19

EL:10594.52

SET

I-70 CM-MP 190.00

CDOT TYPE II

N: 1291764.90

E: 2143375.02

EL:10601.24



FOUND

VAIL PASS

NGS HORZ DISK

N: 1291046.55

E: 2142820.45

EL:10611.00



FOUND

I-70 CM-2

CDOT TYPE II MON.

N: 1290440.97

E: 2142591.30

EL:10570.79



FOUND

I-70 CM-1

CDOT TYPE II MON.

N: 1290656.96

E: 2142618.74

EL:10577.99



FOUND

P 448

NGS VERT DISK

N: 1289630.59

E: 2143198.72

EL:10509.69



FOUND

N 448

NGS VERT DISK

N: 1287546.68

E: 2144017.64

EL:10403.35

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