



# DEPARTMENT OF TRANSPORTATION - STATE OF COLORADO CONTROL SURVEY DIAGRAM

ACIM 0705-064

I-70 MP 395.1 to 402.2

Sec 12, T 9 S, R 51 W, 6th PM

Sec 7, 8, 9, 10, 11, 12, & 16, T 9 S, R 50 W, 6th PM

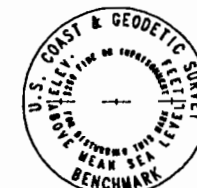
Sec 4, 5, 6, & 7, T 9 S, R 49 W, 6th PM

Kit Carson County, Colorado

AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID

FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO.	SHEET NO.	OF SHEETS
XXX	COLORADO	ACIM 0705-064	74	

FLAGLER EAST



Typical USCGS  
Benchmark Cap



Typical Control  
Mounument Cap

NOT TO SCALE

COORDINATE SUMMARY TABLE  
(ADJUSTED FIELD DATA)

POINT NAME	GEODETIC COORDINATES NAD-83(92) (WGS84)		ELEVATION (meters) NAVD 88	MAPPING ANGLE	SCALE	NAD 83 ZONE 502		MODIFIED PROJECT COORDINATES		ELEV.(ft)	DESCRIPTION
	LATITUDE(W)	LONGITUDE(E)				NORTHING	EASTING	NORTHING(FT)	EASTING(FT)		
I-70 CM-MP 395.1 GPS PROJECT STATION	39°17'03.34569	103°03'06.03966	1481.822	1°32'38.872	0.999941008	468711.263	1125601.905	553957.91	413146.07	4894.42	CDOT Type 2 Monument
I-70 CM-MP 395.4 GPS PROJECT STATION	39°17'01.10937	103°02'46.73122	1488.106	1°32'51.050	0.999940973	468654.809	1126066.323	553772.84	414670.19	4882.33	CDOT Type 2 Monument
I-70 CM-MP 395.6 GPS PROJECT STATION	39°16'57.77395	103°02'31.03422	1484.031	1°33'00.950	0.999940922	468562.159	1126445.149	553468.58	415913.41	4868.66	CDOT Type 2 Monument
I-70 CM-MP 396.1 GPS PROJECT STATION	39°16'50.56830	103°02'00.01181	1475.162	1°33'20.515	0.999940812	468360.167	1127194.378	552805.75	418372.22	4838.76	CDOT Type 2 Monument
I-70 CM-MP 396.3 GPS PROJECT STATION	39°16'46.27191	103°01'43.34888	1472.576	1°33'31.024	0.999940747	468238.599	1127597.175	552406.73	419694.11	4831.28	CDOT Type 2 Monument
G 58 1935 (USCGS) GPS	39°16'47.54281	103°01'35.33114	1470.421	1°33'38.081	0.999940766	468263.004	1127788.194	552552.45	420320.99	4824.21	3in Brass Cap set in concrete post
I-70 CM-MP 396.8 GPS PROJECT STATION	39°16'42.11334	103°01'27.00978	1488.930	1°33'41.329	0.999940685	468121.068	1127992.116	552021.02	420990.22	4819.31	CDOT Type 2 Monument
I-70 CM-MP 397.1 GPS PROJECT STATION	39°16'35.39697	103°00'59.60716	1460.616	1°33'58.812	0.999940585	467931.955	1128654.288	551400.39	423163.32	4792.04	CDOT Type 2 Monument
I-70 CM-MP 397.3 GPS PROJECT STATION	39°16'30.73014	103°00'41.72787	1455.605	1°34'09.888	0.999940516	467799.822	1129086.591	550966.76	424582.05	4775.40	CDOT Type 2 Monument
I-70 CM-MP 397.8 GPS PROJECT STATION	39°16'27.98250	103°00'25.41236	1446.806	1°34'20.176	0.999940476	467725.844	1129479.819	550723.96	425872.53	4748.13	CDOT Type 2 Monument
I-70 CM-MP 398.0 GPS PROJECT STATION	39°16'21.54386	103°00'02.24296	1447.432	1°34'34.791	0.999940382	467542.625	1130040.400	550122.70	427712.24	4748.13	CDOT Type 2 Monument
I-70 CM-MP 398.2 GPS PROJECT STATION	39°16'18.50992	102°59'45.04272	1466.475	1°34'45.639	0.999940338	467480.455	1130455.093	549853.03	429073.17	4811.26	CDOT Type 2 Monument
I-70 CM-MP 398.4 GPS PROJECT STATION	39°16'19.59519	102°59'28.52465	1473.293	1°34'56.057	0.999940354	467504.831	1130849.942	549998.66	430368.98	4833.63	CDOT Type 2 Monument
I-70 CM-MP 398.8 GPS PROJECT STATION	39°16'25.13085	102°59'05.82472	1465.740	1°35'10.373	0.999940434	467690.512	1131389.103	550608.03	432138.39	4808.45	CDOT Type 2 Monument
I-70 CM-MP 399.1 GPS PROJECT STATION	39°16'31.18448	102°58'49.43928	1475.224	1°35'20.707	0.999940522	467887.382	1131776.527	551254.11	433409.83	4838.66	CDOT Type 2 Monument
I-70 CM-MP 399.4 GPS PROJECT STATION	39°16'31.73933	102°58'26.44039	1475.532	1°35'35.213	0.999940531	467920.408	1132327.058	551382.49	435216.55	4840.67	CDOT Type 2 Monument
I-70 CM-MP 399.6 GPS PROJECT STATION	39°16'35.86831	102°58'09.31062	1479.015	1°35'48.016	0.999940592	468059.110	1132733.916	551817.68	436551.77	4850.40	CDOT Type 2 Monument
I-70 CM-MP 399.8 GPS PROJECT STATION	39°16'37.87590	102°57'58.33975	1468.693	1°35'54.197	0.999940622	468129.680	1133042.948	552049.21	437565.95	4816.54	CDOT Type 2 Monument
I-70 CM-MP 400.1 GPS PROJECT STATION	39°16'41.01358	102°57'39.72127	1462.470	1°36'04.878	0.999940668	468237.500	1133438.369	552403.09	438863.69	4788.12	CDOT Type 2 Monument
I-70 CM-MP 400.4 GPS PROJECT STATION	39°16'44.52489	102°57'21.89861	1459.353	1°36'18.045	0.999940721	468357.819	1133887.137	552797.98	440270.75	4788.88	CDOT Type 2 Monument
I-70 CM-MP 400.7 GPS PROJECT STATION	39°16'48.19894	102°57'01.23980	1457.248	1°36'28.946	0.999940776	468484.816	1134354.095	553214.78	441888.84	4780.11	CDOT Type 2 Monument
I-70 CM-MP 401.0 GPS PROJECT STATION	39°16'51.15508	102°56'42.41265	1457.205	1°36'40.822	0.999940821	468588.615	1134802.571	553555.40	443340.84	4780.85	CDOT Type 2 Monument
I-70 CM-MP 401.3 GPS PROJECT STATION	39°16'56.03951	102°56'19.89370	1451.883	1°36'55.150	0.999940895	468754.507	1135342.593	554099.82	445112.88	4783.32	CDOT Type 2 Monument
I-70 CM-MP 401.6 GPS PROJECT STATION	39°16'58.75159	102°56'00.80242	1449.806	1°37'07.065	0.999940937	468850.882	1135792.791	554416.11	446590.33	4756.88	CDOT Type 2 Monument
I-70 CM-MP 401.9 GPS PROJECT STATION	39°17'05.58672	102°55'45.33453	1444.807	1°37'16.820	0.999941042	469072.055	1136157.372	555141.95	447786.80	4740.17	CDOT Type 2 Monument

## CONSTRUCTION SURVEYING AND MONUMENTATION REQUIREMENTS:

- 1). This Survey Control Diagram represents the Division established horizontal and vertical control for the project. 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). If construction activity disturbs any R-O-W marker, property pin, or other survey monument, it is the Contractor's responsibility to replace, restore, or rehabilitate the monument according to State Statutes and the rules and regulations set forth by the State Board of Registration for Professional Engineers and Professional Land Surveyors.
- 3). A presurvey conference is required before all construction projects begin.
- 4). 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.
- 5). 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.

- 6). 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.
- 7). Control survey procedures, statistical analysis, and accuracy obtained for horizontal and vertical control shall be documented in the field book.
- 8). Field notes shall be kept in a control survey book, alignment book, bench book, cross-section book, major and minor structure book, as needed for the project.
- 9). Legible copies of the field books shall be submitted to the Project Engineer for review on a monthly basis.
- 10). All changes made to plan design elements shall be brought to the attention of the Project Engineer in writing.
- 11). 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.
- 12). 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.

BASIS OF BEARINGS: Bearings used in the calculation of coordinates are based on a grid bearing of S 83°04'09" E from I-70 CM-MP 395.1 to I-70 CM-MP 395.4 as obtained from a Global Positioning System (GPS) survey based on the Colorado High Accuracy Reference Network (CHARN). I-70 CM-MP 395.1 and I-70 CM-MP 395.4 are described in detail below.

BASIS OF ELEVATIONS: Project is based on a U.S. Coast and Geodetic Survey (USCGS) benchmark G 58 1938 set in 24cm by 24cm concrete post with an NAVD '88 elevation of 1470.421m G 58 1938 is part of Colorado Line 14, leveled in 1938.

COORDINATE DATUM: Coordinates are modified Colorado State Plane Central Zone NAD '83 coordinates. State Plane coordinates were modified to a mean project elevation of 1463.04 M. The combined elevation/scale correction factor used to modify the coordinates was 0.999711111. The CHPN is based on the WGS '84 (92) datum.



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.



USCGS benchmarks were found. G 58 1938 is a 9cm brass caps (as shown) set in concrete post. (GPS)



ROW - See tabulation for descriptions of monuments found.

(GPS) - Points were located using GPS and tied to the CHARN. see symbol for monument type.

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.

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, 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 August 1, 1993 to January 1, 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



AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID

FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO.	SHEET NO.	OF SHEETS
8	COLORADO	ACIM 0705-064	75	

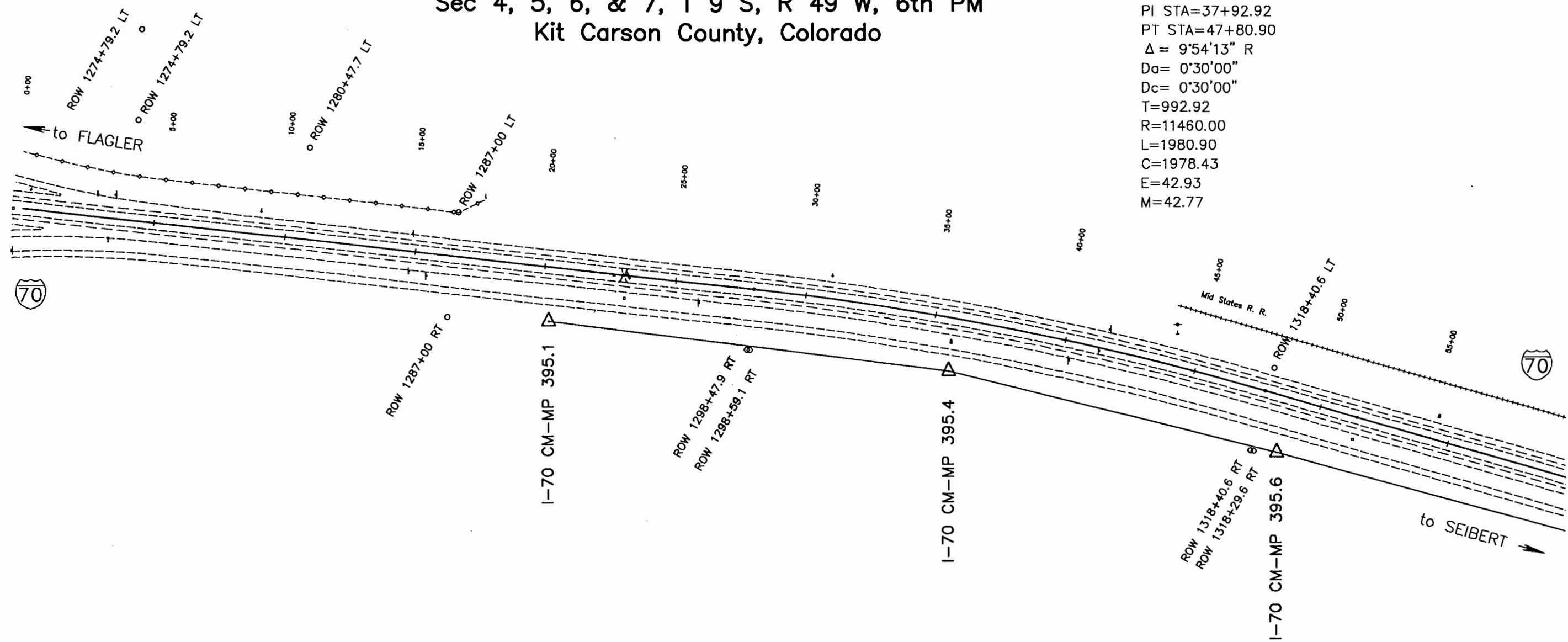
FLAGLER EAST

# DEPARTMENT OF TRANSPORTATION - STATE OF COLORADO

## CONTROL SURVEY DIAGRAM

ACIM 0705-064  
I-70 MP 395.1 to 402.2  
Sec 12, T 9 S, R 51 W, 6th PM  
Sec 7, 8, 9, 10, 11, 12, & 16, T 9 S, R 50 W, 6th PM  
Sec 4, 5, 6, & 7, T 9 S, R 49 W, 6th PM  
Kit Carson County, Colorado

PC STA=27+99.99  
PI STA=37+92.92  
PT STA=47+80.90  
 $\Delta = 9^{\circ}54'13''$  R  
 $D\alpha = 0^{\circ}30'00''$   
 $Dc = 0^{\circ}30'00''$   
T=992.92  
R=11460.00  
L=1980.90  
C=1978.43  
E=42.93  
M=42.77



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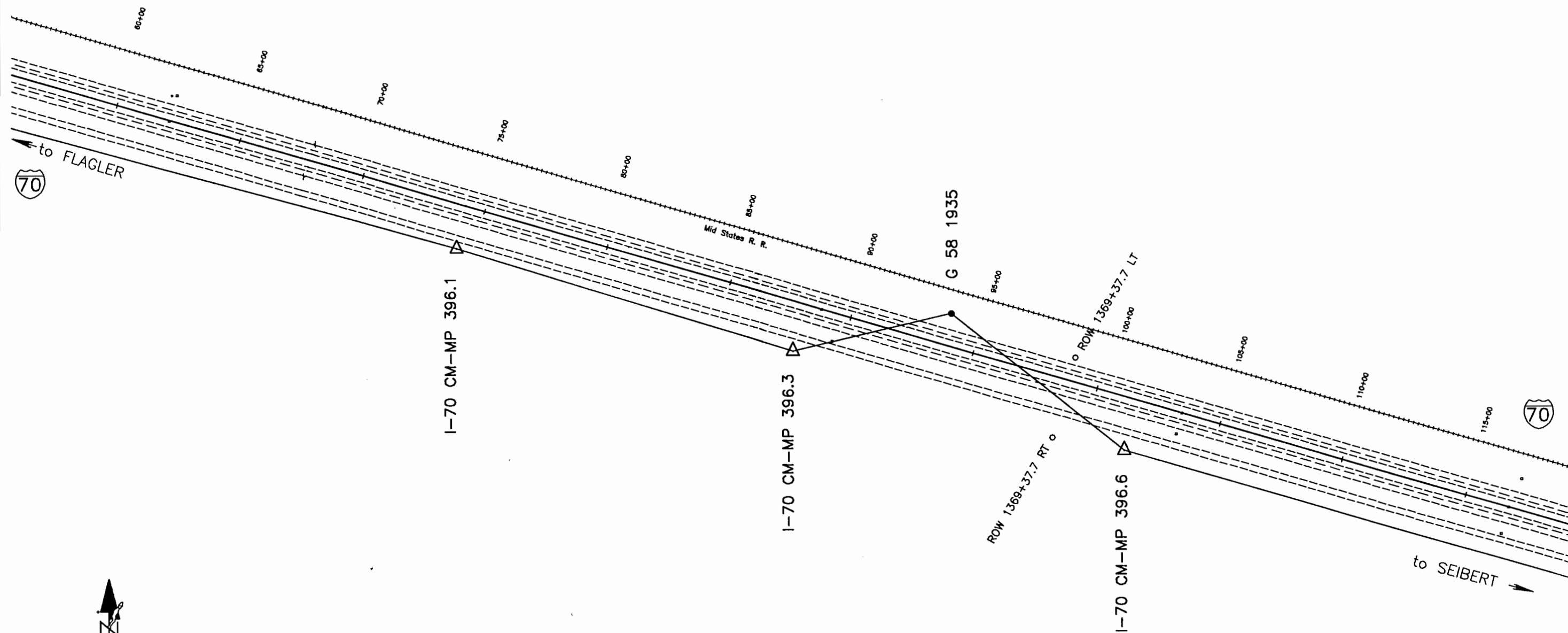
AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID

FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO.	SHEET NO.	OF SHEETS
VIII	COLORADO	ACIM 0705-064	76	

FLAGLER EAST

# DEPARTMENT OF TRANSPORTATION - STATE OF COLORADO CONTROL SURVEY DIAGRAM

ACIM 0705-064  
I-70 MP 395.1 to 402.2  
Sec 12, T 9 S, R 51 W, 6th PM  
Sec 7, 8, 9, 10, 11, 12, & 16, T 9 S, R 50 W, 6th PM  
Sec 4, 5, 6, & 7, T 9 S, R 49 W, 6th PM  
Kit Carson County, Colorado



● USCGS benchmarks were found. G 58 1938 is a 9cm brass caps (as shown) set in concrete post. (GPS) - Points located using GPS and tied to the CHPN.

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AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID

FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO.	SHEET NO.	OF SHEETS
200	COLORADO	ACIM 0705-064	77	

FLAGLER EAST

ACIM 0705-064

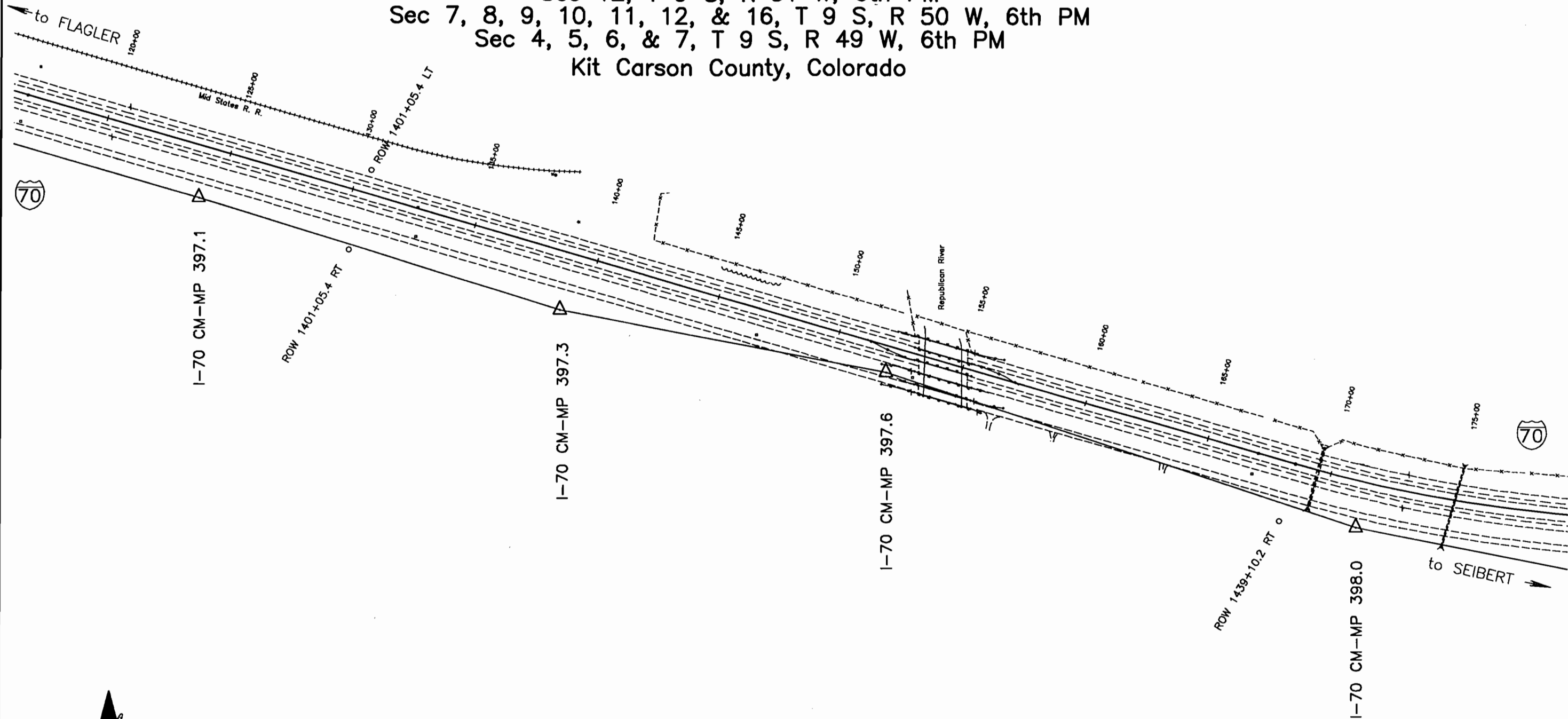
I-70 MP 395.1 to 402.2

Sec 12, T 9 S, R 51 W, 6th PM

Sec 7, 8, 9, 10, 11, 12, & 16, T 9 S, R 50 W, 6th PM

Sec 4, 5, 6, & 7, T 9 S, R 49 W, 6th PM

Kit Carson County, Colorado



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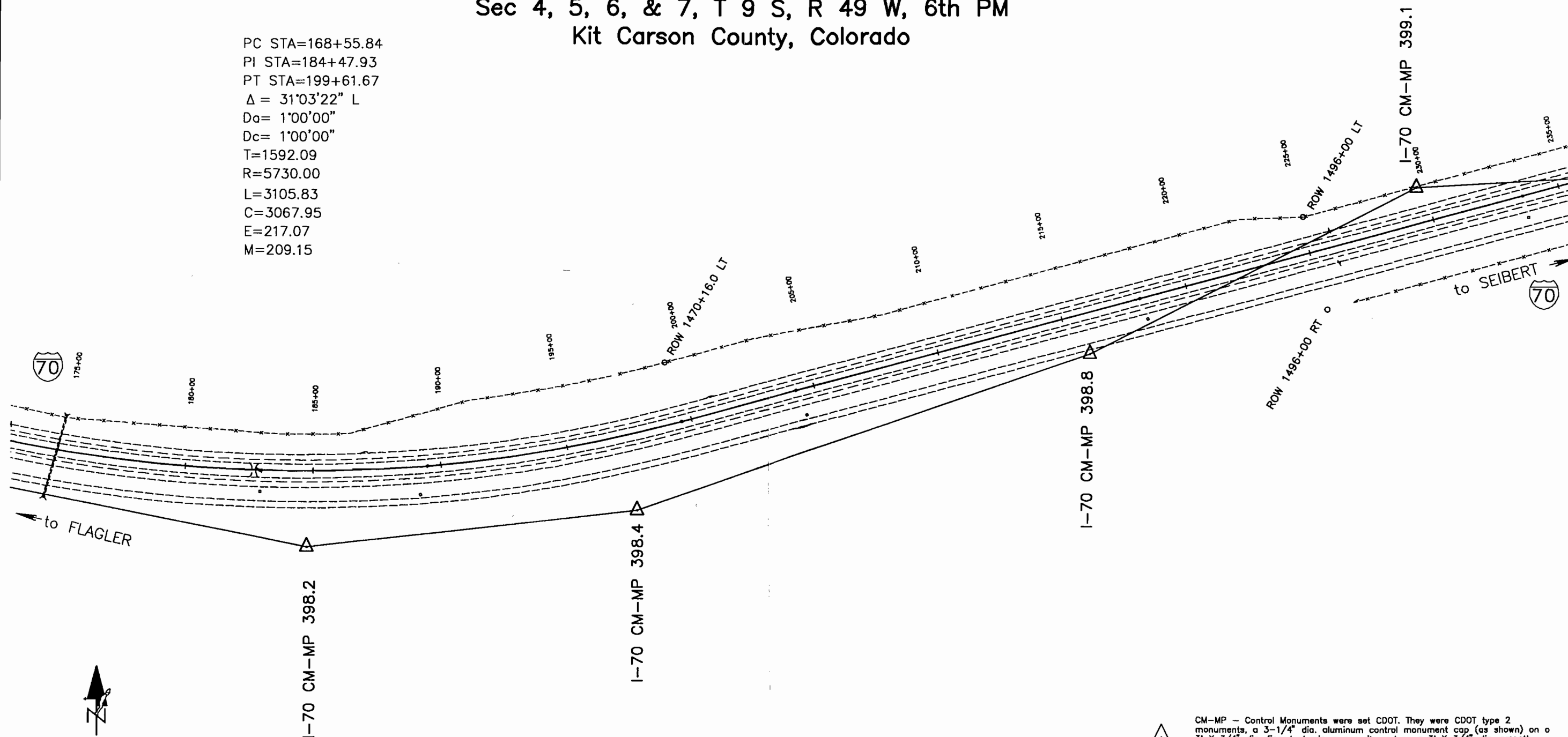
AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID

FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO.	SHEET NO.	OF SHEETS
100	COLORADO	ACIM 0705-064	78	

FLAGLER EAST

ACIM 0705-064  
I-70 MP 395.1 to 402.2  
Sec 12, T 9 S, R 51 W, 6th PM  
Sec 7, 8, 9, 10, 11, 12, & 16, T 9 S, R 50 W, 6th PM  
Sec 4, 5, 6, & 7, T 9 S, R 49 W, 6th PM  
Kit Carson County, Colorado

PC STA=168+55.84  
PI STA=184+47.93  
PT STA=199+61.67  
 $\Delta = 31^{\circ}03'22''$  L  
Da= 1'00'00"  
Dc= 1'00'00"  
T=1592.09  
R=5730.00  
L=3105.83  
C=3067.95  
E=217.07  
M=209.15



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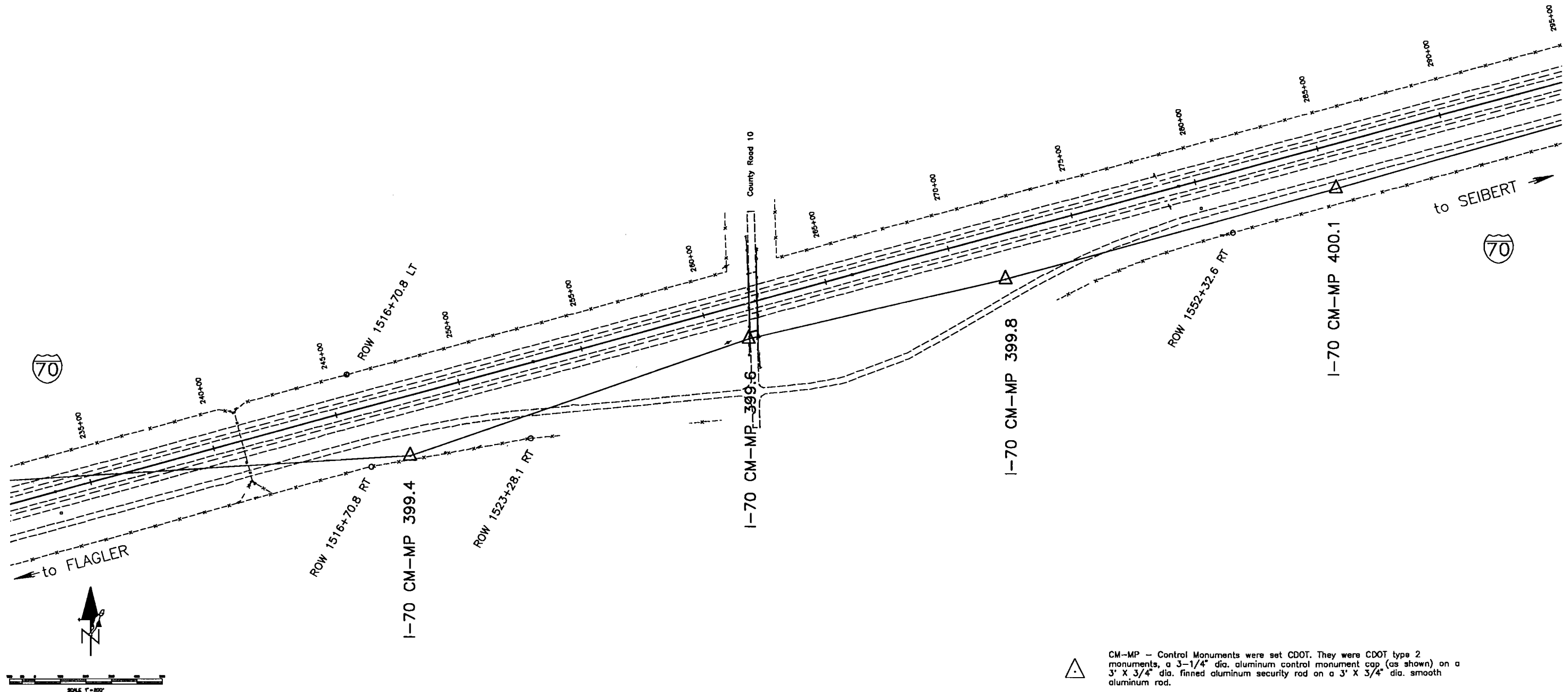
AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID

FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO.	SHEET NO.	OF SHEETS
VIII	COLORADO	ACIM 0705-064	79	

FLAGLER EAST

# DEPARTMENT OF TRANSPORTATION - STATE OF COLORADO CONTROL SURVEY DIAGRAM

ACIM 0705-064  
I-70 MP 395.1 to 402.2  
Sec 12, T 9 S, R 51 W, 6th PM  
Sec 7, 8, 9, 10, 11, 12, & 16, T 9 S, R 50 W, 6th PM  
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Kit Carson County, Colorado





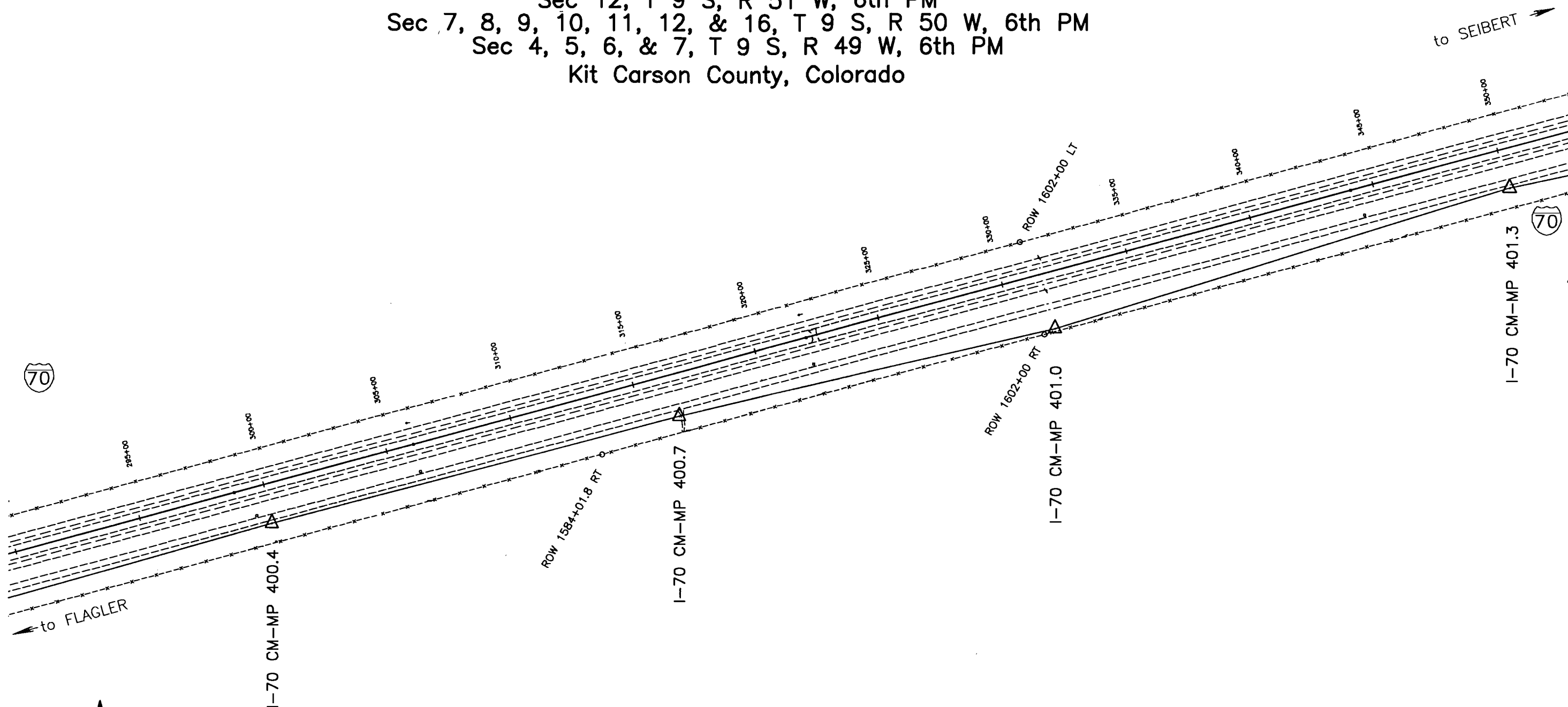
AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID

FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO.	SHEET NO.	OF SHEETS
270	COLORADO	ACIM 0705-064	80	

FLAGLER EAST

# DEPARTMENT OF TRANSPORTATION - STATE OF COLORADO CONTROL SURVEY DIAGRAM

ACIM 0705-064  
I-70 MP 395.1 to 402.2  
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Sec 7, 8, 9, 10, 11, 12, & 16, T 9 S, R 50 W, 6th PM  
Sec 4, 5, 6, & 7, T 9 S, R 49 W, 6th PM  
Kit Carson County, Colorado



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# DEPARTMENT OF TRANSPORTATION - STATE OF COLORADO CONTROL SURVEY DIAGRAM

ACIM 0705-064

I-70 MP 395.1 to 402.2

Sec 12, T 9 S, R 51 W, 6th PM

Sec 7, 8, 9, 10, 11, 12, & 16, T 9 S, R 50 W, 6th PM

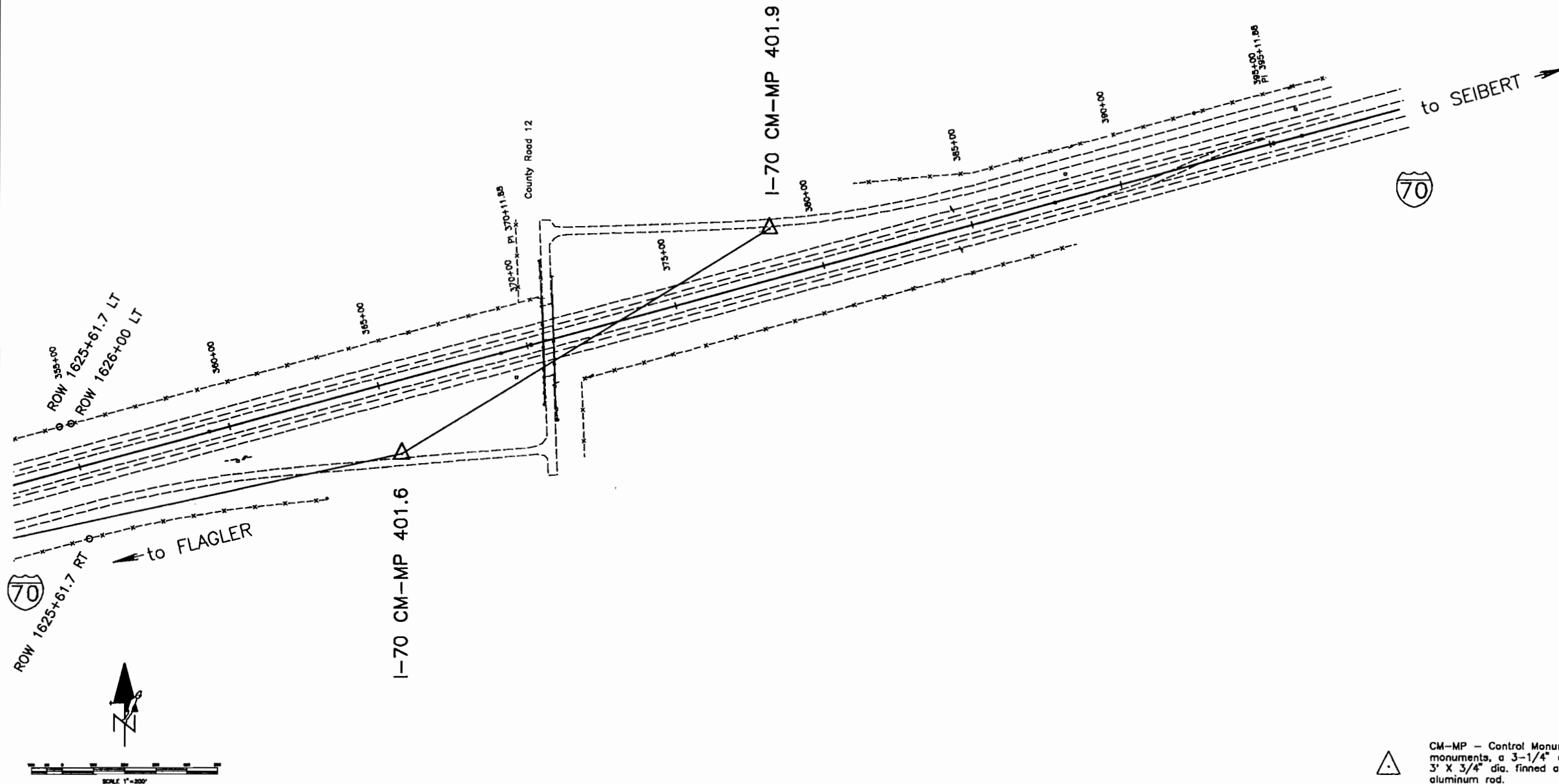
Sec 4, 5, 6, & 7, T 9 S, R 49 W, 6th PM

Kit Carson County, Colorado

AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID

FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO.	SHEET NO.	OF SHEETS
VIII	COLORADO	ACIM 0705-064	81	

FLAGLER EAST



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DEPARTMENT OF TRANSPORTATION - STATE OF COLORADO  
CONTROL SURVEY DIAGRAM

AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID

FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO.	SHEET NO.	OF SHEETS
VIII	COLORADO	ACIM 0705-064	82	

FLAGLER EAST

ACIM 0705-064  
I-70 MP 395.1 to 402.2  
Sec 12, T 9 S, R 51 W, 6th PM  
Sec 7, 8, 9, 10, 11, 12, & 16, T 9 S, R 50 W, 6th PM  
Sec 4, 5, 6, & 7, T 9 S, R 49 W, 6th PM  
Kit Carson County, Colorado

Right-of-Way Points

ROW POINT NAME	NORTHING	EASTING	DESCRIPTION
ROW 1274+79.2 700'LT	555054.7	411593.9	3in. Brass Cap in concrete post
ROW 1274+79.2 80'LT	554713.3	411582.9	3in. Brass Cap in concrete post
ROW 1280+47.7 350'LT	554610.6	412232.7	1.5in. Aluminum cap w/washer on #5 rebar
ROW 1287+00.0 168'LT	554389.0	412802.1	1.5in. Aluminum cap w/washer on #5 rebar
ROW 1287+00.0 230'RT	553975.1	412759.8	1.5in. Aluminum cap w/washer on #5 rebar
ROW PC 1298+47.9 100'	553852.9	413901.4	1.5in. Aluminum cap w/washer on #5 rebar
ROW PC 1298+47.9 230'	553851.6	413912.5	1.5in. Aluminum cap w/washer on #5 rebar
ROW EQ PT 1318+29.6 = 1318+50.4 230'RT	553475.8	415828.3	1.5in. Aluminum cap w/washer on #5 rebar
ROW EQ PT 1318+40.6 = 1318+39.1 92'LT	553788.5	415904.4	1.5in. Aluminum cap w/washer on #5 rebar
ROW EQ PT 1318+40.6 = 1318+39.1 230'RT	553478.1	415815.2	1.5in. Aluminum cap w/washer on #5 rebar
ROW 1369+37.7 92'LT	552381.5	420801.4	1.5in. Aluminum cap w/washer on #5 rebar
ROW 1369+37.7 230'RT	552072.2	420712.2	1.5in. Aluminum cap w/washer on #5 rebar
ROW 1401+05.4 230'RT	551198.9	423754.3	1.5in. Aluminum cap w/washer on #5 rebar
ROW 1401+05.4 92'LT	551508.4	423843.1	1.5in. Aluminum cap w/washer on #5 rebar
ROW 1439+10.2 230'RT	550148.9	427413.5	1.5in. Aluminum cap w/washer on #5 rebar
ROW EQ PT 1470+18.0 = 1470+50.8 240'RT	550573.7	430478.4	1.5in. Aluminum cap w/washer on #5 rebar
ROW 1496+00.0 142'LT	551142.4	432968.7	1.5in. Aluminum cap w/washer on #5 rebar
ROW 1496+00.0 230'RT	550783.4	433065.9	1.5in. Aluminum cap w/washer on #5 rebar
ROW 1516+70.8 230'RT	551320.5	435064.5	1.5in. Aluminum cap w/washer on #5 rebar
ROW 1516+70.8 142'LT	551679.7	434967.7	1.5in. Aluminum cap w/washer on #5 rebar
ROW 1523+28.1 ±300'RT	551432.8	435694.2	1.5in. Aluminum cap w/washer on #5 rebar
ROW EQ PT 1552+32.6 = 1531+84.3 230'RT	552232.0	438457.1	1.5in. Aluminum cap w/washer on #5 rebar
ROW 1584+01.8 230'RT	553067.3	441565.3	1.5in. Aluminum cap w/washer on #5 rebar
ROW 1602+00.0 142'LT	553892.8	443204.1	3in. Brass Cap in concrete post
ROW 1602+00.0 230'RT	553533.4	443300.5	1.5in. Aluminum cap w/washer on #5 rebar
ROW 1625+61.7 142'LT	554505.5	445485.0	1.5in. Aluminum cap w/washer on #5 rebar
ROW 1626+00.0 142'LT	554515.4	445522.0	3in. Brass Cap in concrete post
ROW 1625+61.7 230'RT	554148.3	445581.5	1.5in. Aluminum cap w/washer on #5 rebar

Alignment Points

STATIONS	NORTHING	EASTING
PI 0+00.00	554379.42	411144.35
PI 23+00.00	554134.52	413431.28
PC 27+99.99	554081.28	<del>414045.74</del>
PI 37+92.92	553975.57	<del>414045.74</del>
PT 47+80.90	553701.61	415870.09
PC 168+55.84	550370.09	427476.35
PI 184+47.93	549930.82	429006.64
PT 199+61.67	550343.97	430544.19
PI 370+11.88	554768.42	447010.33
PI 395+11.88	555416.08	449424.98
PI 399+28.48	555524.02	449827.35

413928.44  
414415.71

NOTE: Coordinates for Alignment Points and curve data were recieved from the CDOT Design Unit and derived from plans of previous project 170-5(22)406.

To establish geometric control for the construction of this project, the Department has provided the following information:

	Format*
<input checked="" type="checkbox"/> Horizontal Control	CONTROL SURVEY DIAGRAM
<input checked="" type="checkbox"/> Vertical Control	CONTROL SURVEY DIAGRAM
<input type="checkbox"/> Roadway Alignment	_____
<input type="checkbox"/> Original Terrain Data	_____
<input type="checkbox"/> Other: _____	_____

\*Specify the information format, ie. plan sheet, computer disk, computer printout, or other.

The information marked is either contained on the plans or is available from the Engineer.

TYPE OF SURVEY

- ☒ Item 625 - Construction  
☐ Item 629 - Monumentation

TYPE OF PROJECT

- ☐ Landscaping  
☐ Signalization  
☐ Safety Improvement  
☐ Asphalt Overlay  
☒ Concrete Overlay  
☐ Minor Widening  
☐ Major Reconstruction  
☐ New Roadway Construction  
☐ Bridge Replacement  
☐ Bridge Widening  
☐ New Bridge  
☐ Other: \_\_\_\_\_

WORK PERFORMED BY THE CONTRACTOR'S SURVEYOR UNDER ITEM 625:

- ☐ Verification and Maintenance of Horizontal and Vertical Control  
☐ Verify or Determine existing grades and alignments  
☐ Verify or Determine existing topography  
☐ Clearing and Grubbing Limits  
☐ Removal Limits

- ☒ Excavation and Embankment  
☒ Excavation  
☐ Unclassified  
☐ Stripping  
☐ Muck  
☐ Rock  
☐ Borrow  
☐ Other: \_\_\_\_\_  
☒ Embankment  
☐ Site Grading  
☐ Erosion Control (Perm)  
☐ Other: \_\_\_\_\_

SLOPE STAKING	GRID	GRADE STAKES	SPECIAL INTERVAL
YES	-	-	100'
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
YES	-	-	100'
-	-	-	-
-	-	-	-
-	-	-	-

- ☐ Landscaping  
☐ Top Soil  
☐ Seeding  
☐ Mulching  
☐ Planting  
☐ Other: EXISTING ROADWAY

- ☒ Erosion Control  
☐ Seeding (Temp)  
☐ Silt Fences  
☐ Straw Bales  
☐ Temporary Berm  
☐ Riprap (Temp)  
☐ Other (Temp Diversion, Temp Slope Drain, Bush Barrier, Check Dam, Other: \_\_\_\_\_)

- ☒ Roadway Bases  
☐ Untreated Subgrade  
☐ Treated Subgrade  
☐ Aggregate Base Course  
☐ Other: \_\_\_\_\_

- ☒ Pavements  
☐ PMBB - Plant Mix Bituminous Base  
☐ HBP - Hot Bituminous Pavement  
☐ Concrete  
☐ Other: \_\_\_\_\_

BLUE TOPS	GRID	SPECIAL INTERVAL
YES	-	50'
YES	-	50'
YES	-	50'
YES	-	50'
-	-	-
YES	-	50'
YES	-	50'
-	-	-

- ☒ Roadway Elements  
☐ Curb and Gutter  
☒ Drop inlets - alignment and grades  
☐ Retaining Walls  
☐ Guard Rail  
☐ Sidewalk  
☐ Other: \_\_\_\_\_

- ☐ Riprap (Perm)  
☒ Slope and Ditch Paving

- ☒ Minor Structures  
☐ Structure Excavation limits  
☐ Culverts  
☐ Culverts w/ Headwalls and Wingwalls  
☐ Concrete Box Culverts w/ Headwalls and Wingwalls  
☐ Pipes  
☐ Sanitary Sewer  
☐ Storm Sewer  
☐ Water  
☐ Irrigation  
☐ Manholes  
☐ Inlets  
☐ Other: \_\_\_\_\_

- ☒ Major Structures - Signs, Concrete Box Culverts, Bridges - anything assigned a structure number  
☐ Structure Excavation limits  
☐ Concrete Box Culverts w/ Headwalls and Wingwalls  
☐ Piling locations and cut off elevations  
☐ Caisson locations and elevations  
☐ Footing locations, alignment, and elevations  
☐ Abutment/Pier alignment  
☐ Abutment farm locations  
☐ Wingwall skew angles/offsets  
☐ Structural concrete form locations  
☐ Substructure survey (See Subsection 601.12(m))  
☐ Bridge expansion joint(s) alignment and grade (longitudinal and transverse)  
☐ Girder 10th or "n" th point locations and elevations  
☐ Slope and Ditch Paving

- ☒ Fencing  
☐ Temporary  
☐ Permanent  
☐ Sound Barriers  
☐ Other: \_\_\_\_\_

- ☒ Delineators  
☐ Temporary  
☐ Permanent

- ☒ Lighting and Traffic Control Devices (Perm)  
☐ Signal pole locations and elevations  
☐ Light pole locations and elevations  
☐ Signs  
☐ Field verify sign post locations, elevations, and lengths before fabrication  
☐ Other: \_\_\_\_\_

- ☒ Pavement Marking  
☐ Striping (Temp)  
☐ Striping (Perm)  
☐ Symbols  
☐ Other: \_\_\_\_\_

- ☐ Temporary Lighting and Construction Traffic Control Devices  
☐ Signal pole locations and elevations (Temp)  
☐ Light pole locations and elevations (Temp)  
☐ Signs (Temp)  
☐ Other: \_\_\_\_\_

- ☐ Easement (Temp)(Staking)

WORK PERFORMED BY THE CONTRACTOR'S SURVEYOR UNDER ITEM 629:

- ☐ Monumentation  
☐ Control  
☐ Right of Way (Temp) (Staking)  
☐ Right of Way  
☐ Land corners, Aliquot corners  
☐ Easement (Temp)(Staking)  
☐ Easement (Perm)  
☐ Reference the specified existing monuments: \_\_\_\_\_  
☐ Relocate the specified existing monuments: \_\_\_\_\_  
☐ Locate monuments. It is estimated that \_\_\_\_\_ hours are required and the hourly rate shall not exceed \_\_\_\_\_ per hour.

AS CONSTRUCTED		
NO REVISIONS	REVISED	VOID

FEDERAL ROAD REGION NO.	DIVISION	PROJECT NO.	SHEET NO.	OF SHEETS
VIII	COLORADO	Project ACIM 0705-064	83	

FLAGLER EAST

GENERAL NOTES:

All work shall be done in accordance with the CDOT Survey Manual.

Adequate information for establishing lines, grades, and locations for all work items have been specified on the plans. Any additional information required to stake the item or element shall be generated by the Contractor's surveyor.

The Contractor's surveyor shall provide an estimate of the man-hours necessary to complete the work items indicated on this sheet. A copy of this sheet, with the estimated man-hours written to the left of the specified items, shall be submitted with the survey schedule to the Engineer at the Presurvey Conference.

If field books are used they will be furnished by the Department at the Presurvey Conference.

The following surveying notebooks are required:

- ☐ Alignment Notebook  
☒ Benchmark Notebook  
☒ Control Survey/Monumentation Notebook  
☒ Minor Structure Notebook  
☐ Major Structure Notebook  
☒ Slope Staking Notebook  
☒ Grade Notebook  
☒ Miscellaneous Notebook(s)

Stakes and Monuments set by CDOT forces which are damaged or destroyed by the progress of construction shall be replaced by the Contractor at no additional cost to the Department.

The Contractor shall furnish an "as staked" earth work quantity to the Engineer prior to completion of twenty percent (20%) of the planned earth work in any phase as per the CDOT Survey Manual.

The Contractor shall coordinate construction staking on the project with any utility work.

The Contractor shall perform any field surveying and calculations necessary to tie plan grades into field grades.

Additional surveying shall be paid at a rate not to exceed \$ 100.00 per hour.

OTHERS WHO WILL PERFORM WORK: \_\_\_\_\_

COLORADO  
DEPARTMENT OF TRANSPORTATION

SURVEY TABULATION  
SHEET

MARCH 1994