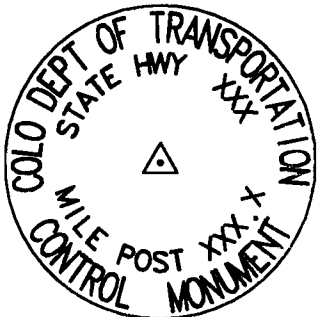




DEPARTMENT OF TRANSPORTATION - STATE OF COLORADO
CONTROL SURVEY DIAGRAM

Project C R100-027
SH 85 MP 193.0 to MP 194.3
SECTION 34, T. 6 S., R. 68 W.
SECTION 3, T. 7 S., R. 65 W.
OF THE 6th P.M.
DOUGLAS COUNTY, COLORADO



COORDINATE SUMMARY TABLE
(ADJUSTED FIELD DATA)

POINT NAME	GEODETIC COORDINATES NAD-83(92) (CHARN)		ELEV (ft)	MAPPING ANGLE	SCALE	NAD 83(92) ZONE CENTRAL		DESCRIPTION
	LATITUDE(N)	LONGITUDE(W)				NORTHING (m)	EASTING (m)	
US 85 CM-MP 194.15	39° 29' 02.83070"	104° 59' 43.11418"	1723.699	0° 19' 05.8909"	0.999958214	488173.296	957819.82	CDOT Type 2 Control Monument
US 85 CM-MP 194.0	39° 28' 54.08360"	104° 59' 37.67887"	1729.140	0° 19' 09.3189"	0.999957931	487904.272	957951.21	CDOT Type 2 Control Monument
US 85 CM-MP 193.8	39° 28' 44.43418"	104° 59' 34.01570"	1731.452	0° 19' 11.6292"	0.999957622	487607.188	958040.41	CDOT Type 2 Control Monument
US 85 CM-MP 193.7	39° 28' 37.59446"	104° 59' 29.92344"	1734.169	0° 19' 14.2102"	0.999957404	487396.808	958139.39	CDOT Type 2 Control Monument
US 85 CM-MP 193.5	39° 28' 28.19954"	104° 59' 26.41245"	1737.704	0° 19' 16.4245"	0.999957107	487107.555	958224.92	CDOT Type 2 Control Monument
US 85 CM-MP 193.3	39° 28' 20.04009"	104° 59' 20.42668"	1737.223	0° 19' 20.1997"	0.999956850	486856.734	958369.40	CDOT Type 2 Control Monument
US 85 CM-MP 193.1	39° 28' 09.39700"	104° 59' 17.84717"	1744.106	0° 19' 21.8265"	0.999956517	486528.866	958432.90	CDOT Type 2 Control Monument
US 85 CM-MP 192.9	39° 27' 59.28007"	104° 59' 14.19619"	1746.018	0° 19' 24.1292"	0.999956204	486217.370	958521.92	CDOT Type 2 Control Monument

TYPICAL:
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. fluted aluminum security rod on a 3" X 3/4" dia. smooth aluminum rod.

PROJECT COORDINATE SUMMARY TABLE
(ADJUSTED FIELD DATA)

POINT NAME	PROJECT COORDINATES		ELEV (ft)	DESCRIPTION
	NORTH (ft)	EAST (ft)		
US 85 CM-MP 194.15	601609.44	142456.98	5655.17	CDOT Type 2 Control Monument
US 85 CM-MP 194.0	600726.52	142888.19	5673.02	CDOT Type 2 Control Monument
US 85 CM-MP 193.8	599751.52	143180.95	5680.61	CDOT Type 2 Control Monument
US 85 CM-MP 193.7	599061.07	143505.79	5689.52	CDOT Type 2 Control Monument
US 85 CM-MP 193.5	598111.82	143786.46	5701.12	CDOT Type 2 Control Monument
US 85 CM-MP 193.3	597288.66	144260.62	5699.54	CDOT Type 2 Control Monument
US 85 CM-MP 193.1	596212.63	144469.03	5722.12	CDOT Type 2 Control Monument
US 85 CM-MP 192.9	595190.34	144761.22	5728.40	CDOT Type 2 Control Monument

BASIS OF BEARINGS: Bearings used in the calculation of coordinates are based on a grid bearing of N. 16°28'18" W. from US 85 CM-MP 193.5 to US 85 CM-MP 193.7.

BASIS OF ELEVATIONS: Project is based on the Colorado Department of Highways (CDOH) benchmark M307 RESET 1982 cap set in the top of the east end of the southeast concrete abutment of the Denver and Rio Grande railroad overpass over U.S. Highway 85 at reference post 200.0 with an elevation of 5444.73 ft.

NOTE: This control survey is for the use of Colorado Department of Transportation personnel. The survey is not a complete boundary survey and does not subdivide land. 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, was not included in this control survey.

NOTICE: 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 certification shown hereon.

SURVEYORS STATEMENT: I, Kevin A. Williams, a Professional Land Surveyor in the State of Colorado, hereby state that this Control Survey Diagram was prepared under my supervision this 30th day of January 1997, from a field survey performed under my supervision from August 25th, 1996 to October 3rd, 1996, 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.

Kevin A. Williams L.S. 28294

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.

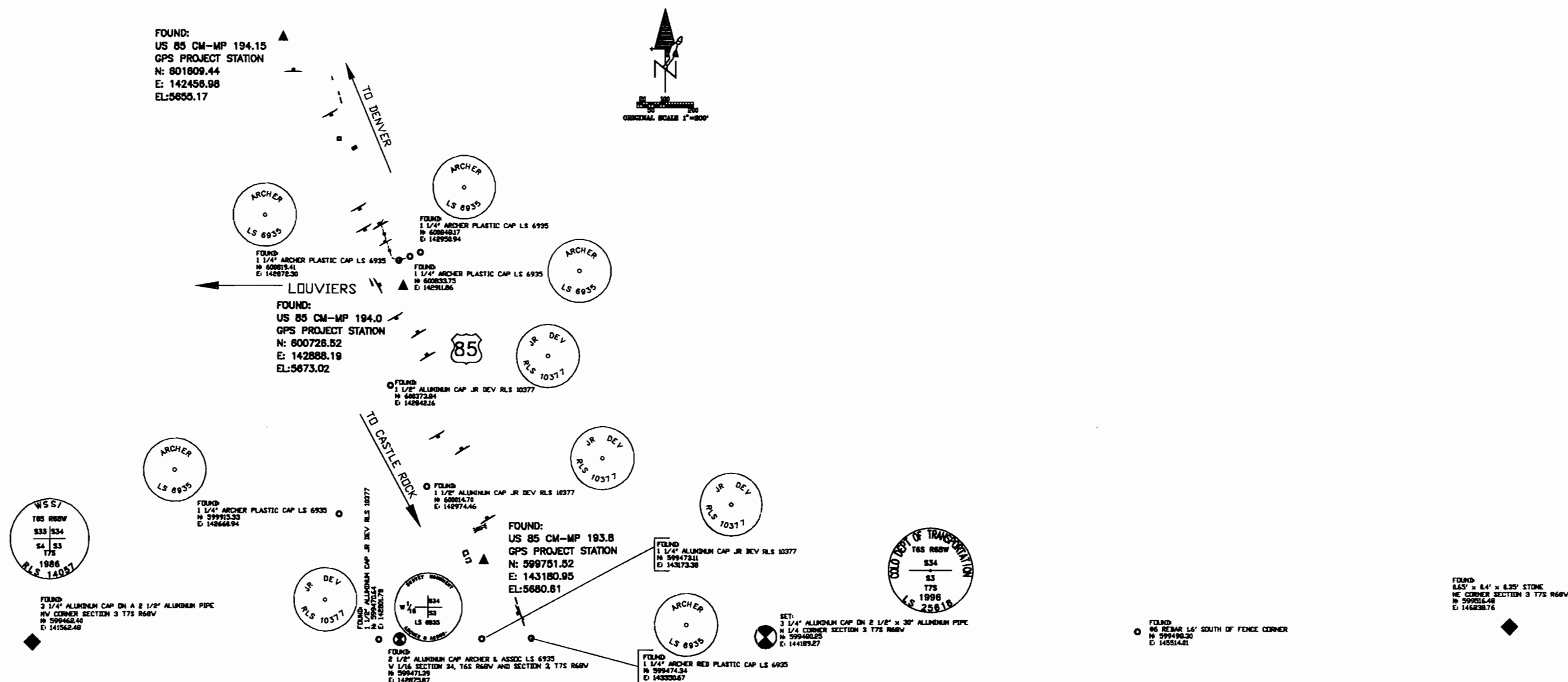
8). The minimum staking intervals for each item are described on the plans or in the CDOT Survey Manual. If the contractor wishes to reduce the minimum intervals, a Contract Modification Order must be negotiated and the cost of the item reduced accordingly.

Computer File Information			Sheet Revisions			Colorado Department of Transportation		As Constructed		SURVEY CONTROL DIAGRAM			Project C R100-027	
Creation Date:	1/6/97	Initials: FY/BC				 Region 1 Construction 18500 E Colfax Avenue Aurora, Colorado 80011 Phone: 303-757-9744 FAX: 303-757-9746 Survey Coordinator JPC	No Revisions:		S.H. 85 - LOUMERS					
Last Modification Date:	1/30/97	Initials: FY/BC					Revised:		11237					
Full Path:	d:\wrkdsk\11237						Void:							
Drawing File Name:	11237csd.dwg								Sheet Subset:	Survey	Subset Sheets:	1/3	Sheet Number	
Acad Ver.	R12	Scale: 1"=200'	Units:	FEET										

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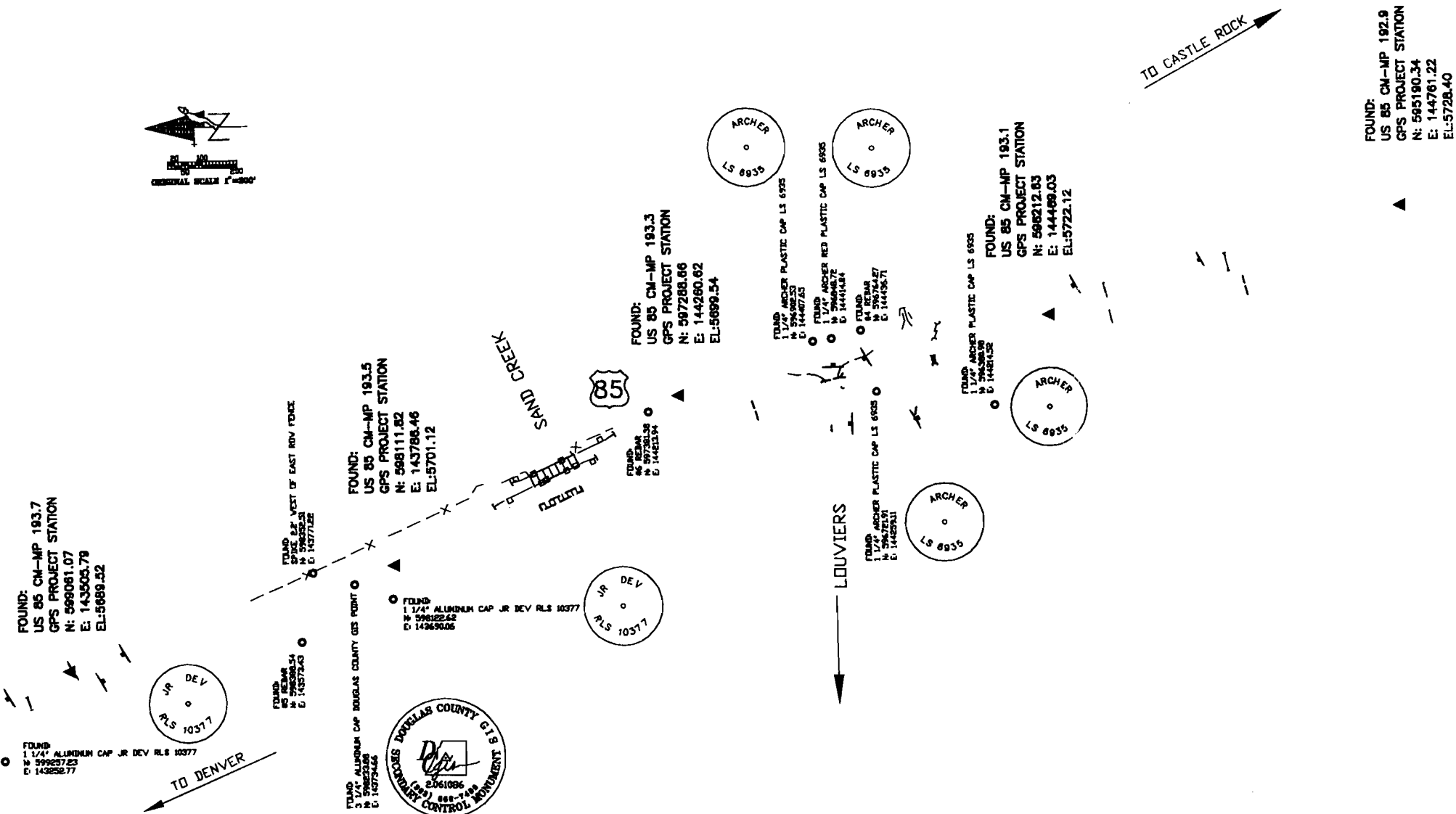


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Drawing File Name:	11237csd.dwg									Sheet Subset:	Survey	Subset Sheets:	2/3
Acad Ver.	R12	Scale:	1"=200'	Units:	FEET							Sheet Number	



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