

Colorado Department of Transportation



Region VI
Address: 2000 South Holly Street
Denver, Colorado; 80222
Phone: 303-757-9922 FAX: 303-757-9390

Region 6 : PED

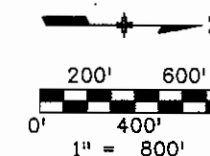
Sheet Revisions

Date	Description	Initials
07/07	General Notes/drafting layers	ddh

Land Survey Control Diagram

Plan Sheet

Project Number: STU 0062-019
Proj. Location: SH-121 at SH-6, Wadsworth Blvd., W. 2nd Ave. to W. 14th Ave.
Sec 2 & 11, T4S, R69W, 6th P.M.
Project Code: Last Mod. Date Subst. Sheets Sheet No. Total No. of Sheets
15215 07-03-07 1 of 3 3 X



GENERAL NOTES:

1. This Land Survey Control Diagram is to document the recovery and/or establishment of survey points that will be the basis of future surveys for right-of-way acquisitions, monumentation, and/or roadway construction. This Survey Control Diagram is not a Monumented Land Survey or Boundary Survey and does not address matters of title.
2. BASIS OF BEARINGS: All bearing shown, or computed using coordinate values listed herein, are Grid bearings of the Colorado coordinate system of 1983, Central Zone (502). The line between Control Points CP 131 and CP 144, shown hereon, bears N26°55'07"W, a distance of 5267.96'.
3. Rectangular coordinates are in US Survey Feet. Project specific coordinates were obtained by multiplying the state plane coordinates of the Fast Static GPS control by a Ground Factor of 1.0002596397 and then truncating the coordinate northing by 1,000,000 and the easting by 3,000,000.
4. Horizontal Control Tolerances meet the precision requirements of CDOT type A control (+/- 0.07' with 95% certainty).
5. Vertical Datum: Elevations are NAVD '88 Datum based on NGS data sheet for benchmark E 406 (PID - KK1391) elevation = 5421.41.
6. Elevations on bench control points were established by differential digital leveling with an accuracy meeting or exceeding 0.035' times the square root of the distance leveled in miles.

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.

Surveyor's Statement:

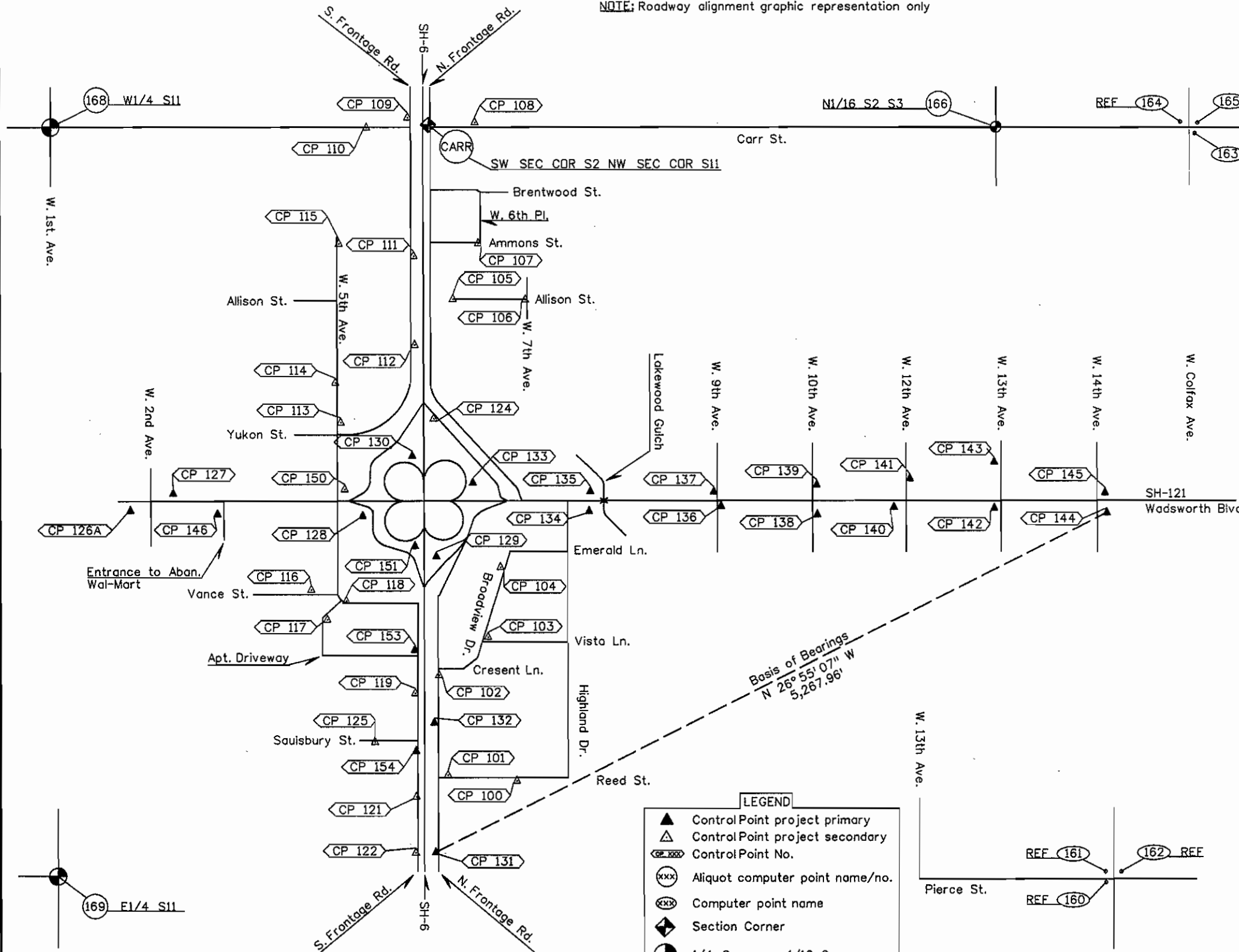
I, Donald D. Hansen, a professional land surveyor licensed in the State of Colorado, do hereby state to the Colorado Department of Transportation that this Land Survey Control Diagram was prepared and the field survey it represents was performed under my responsible charge and, based upon my knowledge, information and belief, is in accordance with applicable standards of practice defined by Colorado Department of Transportation publications. This statement is not a guaranty or warranty, either expressed or implied.

Donald D. Hansen
Donald D. Hansen, PLS No. 14599 Date 7/24/2007

JEFFERSON COUNTY SURVEY DEPOSITING CERTIFICATE:

Deposited this 26 day of July, 2007, at 9:46 o'clock A.M., in Book — at page — of Land Surveys/Right of Way Surveys, under Reception No. 2007087074.
By: Dana L. Cheatham Deputy for
Title: Pam Anderson, Clerk & Recorder

NOTE: Roadway alignment graphic representation only



LEGEND

- ▲ Control Point project primary
- △ Control Point project secondary
- CP XXX Control Point No.
- XXX Aliquot computer point name/no.
- XXX Computer point name
- ◆ Section Corner
- ⊙ 1/4 Corner or 1/16 Corner

102	39°43'32.89439"N	105°04'37.74473"W	5365.27	0°16'00.0705"	1689530.416	3118938.052	102	689969.085	119747.852	5419.77	2" Alum. Cap "CDOH 4.006072 30826"
105	39°43'34.04652"N	105°05'11.67919"W	5387.13	0°15'38.6684"	1689634.790	3116286.146	105	690073.486	117095.257	5441.44	2" Alum. Cap "10717"
106	39°43'39.04498"N	105°05'11.62496"W	5370.07	0°15'38.7026"	1690140.575	3116288.081	106	690579.402	117097.193	5424.41	2" Alum. Cap "10717"
150	39°43'26.47530"N	105°04'54.52830"W	5386.93	0°15'49.4853"	1688874.836	3117629.703	150	689313.335	118439.164	5441.34	2" Alum. Cap "CITY OF LAKEWOOD"
151	39°43'31.29379"N	105°04'49.40468"W	5380.52	0°15'52.7167"	1689364.237	3118027.782	151	689802.862	118837.346	5434.95	3.25" Alum. Cap CDOH "4.006075"
153	39°43'31.23549"N	105°04'40.02629"W	5366.92	0°15'58.6315"	1689361.733	3118760.569	153	689800.358	119570.322	5421.41	3.25" Alum. Cap CDOH "4.006073"
154	39°43'31.27557"N	105°04'30.97104"W	5363.43	0°16'04.3426"	1689369.086	3119468.061	154	689807.713	120277.999	5417.96	3.25" Alum. Cap CDOH "4.006070"

Colorado Department of Transportation



Region VI
Address: 2000 South Holly Street
Denver, Colorado; 80222
Phone: 303-757-9922 FAX: 303-757-9390

Region 6: PED

Sheet Revisions

Date	Description	Initials
07/07	Table Structure / Description	DDH

Land Survey Control Diagram

Data Sheet

Project Number: STU 0062-019				
Proj. Location: SH-121 at SH-6, Wadsworth Blvd., W. 2nd Ave. to W. 14th Ave.				
Sec 2 & 11, T4S, R69W, 6th P.M.				
Project Code:	Last Mod. Date:	Subset Sheets	Sheet No.	Total No. of Sheets
15215	07-03-07	2 of 3	3A	X

Fast Static GPS Survey Aliquot Control Points (GPS derived elevations)

Name	Latitude	Longitude	Ellipsoid Height	Convergence Angle	Northing (SP 502)	Easting (SP 502)	Name	Northing (Project)	Easting (Project)	Elevation NAVD'88	Description
12	39°43'32.42048"N	105°05'27.29277"W	5412.11	0°15'28.8211"	1689464.738	3115066.968	12	689903.390	115875.763	5466.35	3" Alum. Cap "CITY OF LAKEWOOD T4S R69W S2 S3 S10 S11 1990 LS 13212" (section corner 3 2 10 11)
160	39°44'24.60657"N	105°04'18.68633"W	5341.41	0°16'12.0904"	1694769.859	3120402.467	160	695209.889	121212.647	5396.11	3.25" Alum. Cap CDOT REF. PNT. "61.89" (near NE corner section 2-T4S-R69W)
161	39°44'24.56482"N	105°04'19.65969"W	5343.62	0°16'11.4766"	1694765.276	3120326.452	161	695205.304	121136.612	5398.31	3.25" Alum. Cap CDOT ROW "PT. NO. 614 PLS 12083" (near NE corner section 2-T4S-R69W)
162	39°44'25.66068"N	105°04'19.64468"W	5342.64	0°16'11.4860"	1694876.166	3120327.101	162	695316.223	121137.262	5397.33	3.25" Alum. Cap CDOT ROW (near NE corner section 2-T4S-R69W)
163	39°44'25.38826"N	105°05'26.24839"W	5418.12	0°15'29.4798"	1694824.627	3115124.416	163	695264.671	115933.226	5472.39	3.25" Alum. Cap CDOT REF. PNT. "62.65" (near NW corner section 2-T4S-R69W)
164	39°44'24.39274"N	105°05'27.28925"W	5419.47	0°15'28.8233"	1694723.529	3115043.562	164	695163.546	115852.351	5473.73	3.25" Alum. Cap CDOT REF. PNT. "66.81" (near NW corner section 2-T4S-R69W)
165	39°44'25.58521"N	105°05'27.18609"W	5419.49	0°15'28.8884"	1694844.225	3115051.077	165	695284.274	115859.868	5473.75	3.25" Alum. Cap CDOT REF. PNT. "76.63" (near NW corner section 2-T4S-R69W)
166	39°44'11.63036"N	105°05'26.88286"W	5414.23	0°15'29.0796"	1693432.314	3115081.124	166	693871.996	115889.922	5468.47	3.25" Alum. Cap "MERRICK & COMPANY T4S R69W GOVT LOT 2 GOVT LOT 2 GOVT LOT 1 GOVT LOT 1 S3 S2 1996 LS 13155" (N 16th corner section 2 3)
168	39°43'06.38723"N	105°05'27.20404"W	5436.25	0°15'28.8770"	1686830.616	3115085.763	168	687268.584	115894.563	5490.43	3.25" Alum. Cap "CITY OF LAKEWOOD T4S R69W S10 S11 2000 LS 19591" (1/4 corner section 10 11)
169	39°43'06.54130"N	105°04'19.81947"W	5385.49	0°16'11.3758"	1686870.461	3120351.150	169	687308.439	121161.317	5440.04	2.5" Alum. Cap "T4S R69W S11 S12 1997 LS 24670" (1/4 corner section 11 12)

Local site settings

Project latitude: 39°43'43.42515"N
Project longitude: 105°04'54.24311"W
Project height: 5353.815sft
Ground scale factor: 1.0002596397
False northing offset: 999561.056sft
False easting offset: 2999190.536sft

Existant Control used in constraining Fast Static GPS Survey (GPS derived elevations except for Point No. 12)

Name	Latitude	Longitude	Ellipsoid Height	Convergence Angle	Northing (SP 502)	Easting (SP 502)	Name	Northing (Project)	Easting (Project)	Elevation NAVD'88	Description
12	39°43'32.42048"N	105°05'27.29277"W	5412.11	0°15'28.8211"	1689464.738	3115066.968	12	689903.390	115875.763	5466.35	3" Alum. Cap - see Aliquot Table (CDOT R6 Metro Net Point No. 12 (CARR))
1220	39°44'44.25547"N	105°03'11.19129"W	5261.56	0°16'54.6588"	1696783.420	3125665.140	1220	697223.972	126476.687	5316.63	3.25" Alum. Cap in box culvert CDOT "4.019052" (CDOT R6 Metro Net Point No. 1220 (SLOANS LAKE))
1393	39°42'39.39630"N	105°03'57.01077"W	5403.05	0°16'25.7610"	1684132.283	3122146.556	1393	684569.550	122957.189	5457.68	3.5" NGS Brass Cap in conc. "ALAMEDA 1977" PID KK1393
1459	39°44'28.03004"N	105°06'34.91060"W	5500.39	0°14'46.1752"	1695068.328	3109759.645	1493	695508.435	110567.062	5554.25	5/8" Stainless Steel Rod in NGS logo box "D 412 1984" PID KK1459
7958	39°42'46.27781"N	105°07'34.80804"W	5606.65	0°14'08.3985"	1684752.906	3105123.086	7958	685190.334	105929.299	5659.96	5/8" Stainless Steel Rod in NGS logo box "HARD 2001" PID DE7958
DSRC	39°59'29.12991"N	105°15'39.67589"W	5437.00								DSRC (BOULDER CORS ARP) - NAD'83 (CORS) 2002 PID AI2151
P041	39°56'58.15000"N	105°11'39.31685"W	5674.89								P041 (MARSHALL FIELD CORS ARP) - NAD'83 (CORS) 2002 PID DG7429