



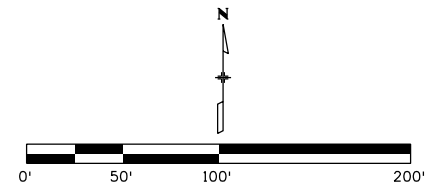
Sheet Revisions

Date mm/yy	Description XXXXXXXX	Initials XXX

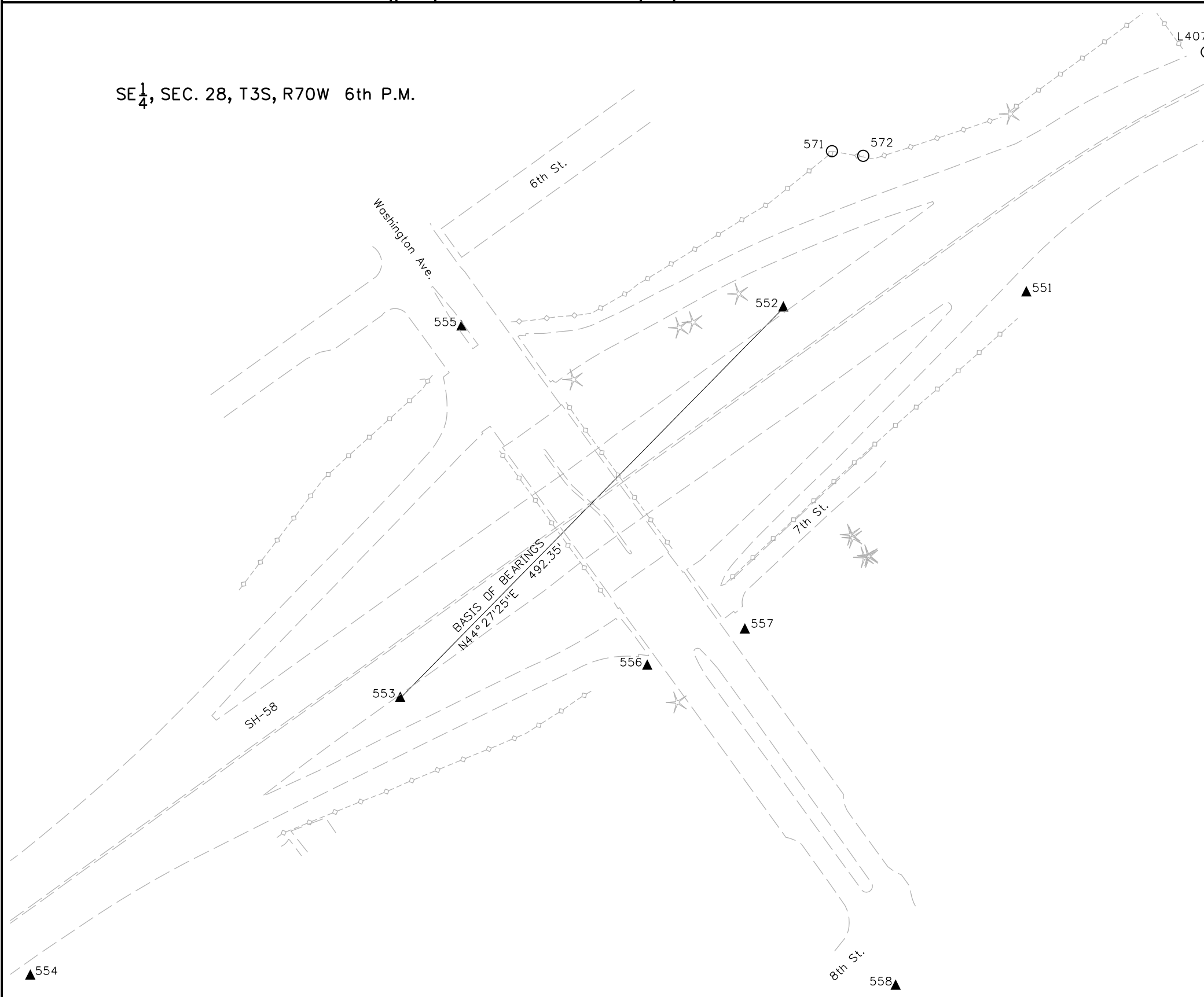
Land Survey Control Diagram

Title Sheet

Project Number: BR 0581-008			
Project Location: SH-058 at Washington Ave., Golden,			
Section 28, T3S, R70W/6th PM, Jefferson County			
Project Code:	Last Mod. Date:	Subset Sheets:	Sheet No.:
15576	08-07-07	1 of 2	Rw 3.01



SE 1/4, SEC. 28, T3S, R70W 6th P.M.



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 design purposes, right-of-way acquisitions, monumentation, and/or roadway construction. This Land Survey Control Diagram is not a Monumented Land Survey or Boundary Survey and does not address matters of title.
2. **BASIS OF BEARINGS:** Grid bearings of the Colorado coordinate system of 1983, central zone (502), determined by a Fast Static GPS survey of the control points shown herein. The line between point 553 and point 552, shown herein, bears N44°27'25"E, a distance of 492.35 feet.
3. Geodetic coordinates are NAD'83 (1992) datum based on a Fast Static GPS survey holding published values on the primary control points shown herein.
4. **Project specific** coordinates were obtained by multiplying the project's state plane coordinates by 1.0002650689 and then truncating the northing by 1,000,000 and the easting by 3,000,000. Published units are in US survey feet: 1 survey foot = (1200/3937) meters
5. Horizontal Control Tolerances meet the precision requirements of CDOT type A control (+/- 0.07' with 95% certainty).
6. Vertical Datum: Elevations are NAVD'88 Datum established by digital differential levels run from NGS benchmark "L407" (PID KK1370), elevation = 5717.85'.
7. Elevations on control points were established by digital differential levels 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 herein.

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, PLS No. 14599

Date

JEFFERSON COUNTY DEPOSITING CERTIFICATE:

Deposited this _____ day of _____ 200__ at _____

o'clock ____ .M. under Reception No. _____.

By: _____

Title: _____



Sheet Revisions

Date mm/yy	Description XXXXXXXX	Initials XXX

Land Survey Control Diagram

Plan Sheet

Project Number: BR 0581-008			
Project Location: SH-058 at Washington Ave., Golden,			
Section 28, T3S, R70W/6th PM, Jefferson County			
Project Code:	Last Mod. Date:	Subset Sheets:	Sheet No.:
15576	08-07-07	2 of 2	Rw 3.02

Existant control points used in constraining Fast Static GPS Survey (Published/GPS derived elevations)

Point	Latitude	Longitude	Ellipsoid Height	Convergence Angle	Northing SP (502)	Easting SP (502)	Name	Northing Project	Easting Project	Elevation	Description
1010	39°45'14.38366"N	105°14'13.06565"W	5725.81	0°09'57.22160"	1699629.959	3073957.053	1010	700080.478	74771.863	5776.16	CDOT Type 2A mon. w/3-1/4" Alum. Cap (R6 Metro Network) 4.026211
H 407	39°44'45.75003"N	105°12'31.41461"W	5699.98	0°11'01.33186"	1696756.866	3081905.422	H 407	697206.623	82722.339	5751.29	NGS 5/8" Stainless steel rod in logo box PID - KK1373
KAISER	39°46'57.83315"N	105°08'18.27198"W	5420.67	0°13'40.98627"	1710192.872	3101625.203	KAISER	710646.191	102447.347	5474.14	CDOH Type 5 mon. 3-1/4" Brass Cap (R6 Metro Network) "4.047124 1990"
NGS CORS stations used in constraining Fast Static GPS Survey											
DSRC	39°59'29.12991"N	105°15'39.67589"W	5440.31	0°09'02.59743"	1786103.704	3066965.148	DSRC				DSRC (BOULDER CORS ARP) NAD'83 (CORS) 2002, PID - AI2151
PLTC	40°10'53.71231"N	104°43'33.33347"W	4937.05	0°29'17.52147"	1856217.384	3216313.403	PLTC				PLTC (PLATTEVILLE CORS ARP) NAD'83 (CORS) 2002, PID - AF9517
ZDV1	40°11'14.27224"N	105°07'37.96036"W	5063.46	0°14'06.41038"	1857590.311	3104167.493	ZDV1				ZDV1 (DENVER WAAS 1 CORS ARP) NAD'83 2002, PID - DF9219

Local site settings

Project latitude: 39°45'35.65150"N
 Project longitude: 105°13'31.19593"W
 Project height: 5671.310sft
 Ground scale factor: 1.0002650689
 False northing offset: 999548.908sft
 False easting offset: 2999184.325sft

Fast Static GPS Survey - (Benched elevation)

Point	Latitude	Longitude	Ellipsoid Height	Convergence Angle	Northing SP (502)	Easting SP (502)	Name	Northing Project	Easting Project	Elevation	Description
551	39°45'38.64263"N	105°13'27.94134"W	5676.90	0°10'25.68103"	1702095.075	3077473.875	551	702546.247	78289.618	5727.72	Set CDOT Type 2 mon. w/3-1/4" Alum. Cap "CP 551"
552	39°45'38.51479"N	105°13'30.74091"W	5667.04	0°10'23.91538"	1702081.477	3077255.286	552	702532.646	78070.970	5717.83	Set CDOT Type 2 mon. w/3-1/4" Alum. Cap "CP 552"
553	39°45'35.05296"N	105°13'35.16887"W	5666.64	0°10'21.12271"	1701730.144	3076910.544	553	702181.220	77726.137	5717.37	Set CDOT Type 2 mon. w/3-1/4" Alum. Cap "CP 553"
554	39°45'32.59256"N	105°13'39.43965"W	5677.30	0°10'18.42917"	1701480.184	3076577.764	554	701931.194	77393.269	5727.99	Set CDOT Type 2 mon. w/3-1/4" Alum. Cap "CP 554"
555	39°45'38.35477"N	105°13'34.44986"W	5689.91	0°10'21.57618"	1702064.411	3076965.688	555	702515.575	77781.296	5740.65	Set CDOT Type 2 mon. w/3-1/4" Alum. Cap "CP 555"
556	39°45'35.33218"N	105°13'32.32119"W	5673.23	0°10'22.91871"	1701759.069	3077132.848	556	702210.152	77948.500	5723.99	Set CDOT Type 2 mon. w/3-1/4" Alum. Cap "CP 556"
557	39°45'35.65150"N	105°13'31.19593"W	5671.31	0°10'23.62840"	1701791.644	3077220.627	557	702242.736	78036.303	5722.08	Set CDOT Type 2 mon. w/3-1/4" Alum. Cap "CP 557"
558	39°45'32.47905"N	105°13'29.47097"W	5641.46	0°10'24.71631"	1701471.045	3077356.310	558	701922.052	78172.021	5692.22	Set CDOT Type 2 mon. w/3-1/4" Alum. Cap "CP 558"

Topo. property pin evidence (single base RTK, GPS derived elevations)

Name	Northing (Project)	Easting (Project)	Elevation NAVD'88	Description
571	702673.77	78114.71	5741.13	1" yellow plastic cap "ALPINE SURVEY PLS 9996"
572	702669.57	78142.82	5740.45	1" yellow plastic cap "BELL PLS 16828"