

Colorado Department of Transportation

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Region 1 DAS

Sheet Revisions

Located in
Sec. 31 of T5S, R77W
Sec. 6, 7, 18, 19, 30 of T6S, R77W
SUMMIT COUNTY, COLORADO

Land Survey Control Diagram

Project Number: STA 0091-024
Project Location: SH 9 - Valley Brook to Swan Mtn. Rd.
Project Location: M.P. 87.92 to M.P. 93.52
Project Control: Last West Total Station Sheet No. 1 Total No. of Sheets 14997

PROJECT COORDINATE SUMMARY TABLE
(ADJUSTED FIELD DATA) - US FEET

LAND SURVEY CONTROL DIAGRAM

POINT NAME PROJECT COORDINATES ELEV. (NAVD 88) DESCRIPTION

879 1807328.90 2847104.17 9465.41 SH 9 CM-MP 87.92 CDOT Type 2

881 1808435.80 2847016.13 9448.52 SH 9 CM-MP 88.13 CDOT Type 2

883 1809404.05 2846889.73 9446.37 SH 9 CM-MP 88.33 CDOT Type 2

885 1810334.02 2846790.65 9432.31 SH 9 CM-MP 88.49 CDOT Type 2

887 1811278.04 2846713.11 9398.78 SH 9 CM-MP 88.67 CDOT Type 2

888 1812111.36 2846519.31 9396.04 SH 9 CM-MP 88.84 CDOT Type 2

889 1813213.00 2846477.04 9372.07 SH 9 CM-MP 88.99 CDOT Type 2

892 1814305.95 2846714.96 9343.30 SH 9 CM-MP 89.17 CDOT Type 2

894 1815256.96 2846689.45 9328.84 SH 9 CM-MP 89.36 CDOT Type 2

895 1816271.60 2847121.46 9314.79 SH 9 CM-MP 89.50 CDOT Type 2

896 1816965.92 2847301.30 9292.46 SH 9 CM-MP 89.60 CDOT Type 2

899 1818035.68 2847513.85 9271.39 SH 9 CM-MP 89.90 CDOT Type 2

901 1819129.13 2847708.13 9250.78 SH 9 CM-MP 90.09 CDOT Type 2

903 1820058.85 2847912.58 9236.17 SH 9 CM-MP 90.28 CDOT Type 2 DESTROYED

905 1821008.37 2848306.22 9217.08 SH 9 CM-MP 90.46 CDOT Type 2 ROD-NO CAP

906 1821975.45 2848338.12 9201.08 SH 9 CM-MP 90.64 CDOT Type 2

908 1823031.11 2848611.70 9178.14 SH 9 CM-MP 90.85 CDOT Type 2

910 1824148.67 2848718.92 9168.71 SH 9 CM-MP 91.03 CDOT Type 2

912 1825210.87 2849045.34 9151.68 SH 9 CM-MP 91.24 CDOT Type 2

915 1826304.32 2848753.20 9144.22 SH 9 CM-MP 91.46 CDOT Type 2

916 1827042.12 2848193.24 9126.95 SH 9 CM-MP 91.63 CDOT Type 2

918 1827800.60 2847614.62 9113.33 SH 9 CM-MP 91.81 CDOT Type 2

920 1828607.62 2846769.56 9087.11 SH 9 CM-MP 92.03 CDOT Type 2

922 1829270.54 2846206.43 9088.37 SH 9 CM-MP 92.19 CDOT Type 2

924 1830413.03 2845961.48 9073.28 SH 9 CM-MP 92.41 CDOT Type 2

926 1831375.34 2845779.67 9060.12 SH 9 CM-MP 92.60 CDOT Type 2

928 1832215.97 2845604.03 9049.86 SH 9 CM-MP 92.78 CDOT Type 2

931 1832981.00 2844839.73 9036.12 SH 9 CM-MP 93.12 CDOT Type 2

933 1833826.52 2844417.76 9040.76 SH 9 CM-MP 93.33 CDOT Type 2

935 1835065.81 2844757.80 9039.18 SH 9 CM-MP 93.52 CDOT Type 2 Traversed

Construction Surveying and Monumentation Requirements

1. This Land Survey Control 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 should be set flush with the ground. Witness posts should be installed 2 feet 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 should be completed in the same day that installation is commenced. Under no circumstances should the roadway be left open overnight.

4. When installing Type 3-A monuments, the aluminum monument box should be positively secured in the roadway surface. The monument box should be caulked with asphalt caulk between the monument box and the edges of the roadway surface to provide a positive moisture barrier around the monument box.

5. Control survey procedures, statistical analysis, and accuracy obtained for horizontal and vertical control should be documented in the field book.

6. Legible copies of the field books should be submitted to the Project Engineer for review on a monthly basis.

7. It is ultimately the prime Contractor's responsibility to insure that these requirements, as well as any contained in the CDOT specifications, project special provisions, and CDOT Survey Manuals 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.

9. Whenever the contract includes the setting of CDOT Primary Control monuments, a Project Control Diagram, signed and sealed by the P.E.S. is responsible charge, shall be submitted to the Project Engineer. A Micro Station drawing on CD shall accompany the hard copy.

Surveyor Statement (Land Survey Control Diagram)

I, Betty J. Claybrook, a professional land surveyor licensed in the State of Colorado, do hereby state that and on the behalf of the Colorado Department of Transportation this Land Survey Control Diagram was prepared and the field survey if 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.

Betty J. Claybrook, PLS No. 3150 Date

Colorado Department of Transportation

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Region 1 JPC

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Land Survey Control Diagram

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Project Control: Last West Total Station Sheet No. 1 Total No. of Sheets 14997

GEODETIC COORDINATE SUMMARY TABLE
(ADJUSTED FIELD DATA) - METERS

POINT NAME GEODETIC COORDINATES NAD-83(92) (CHARN) NAD83/92 ZONE 5002 ELLIP. ELEV. (NAVD 88) MAPPING ANGLE GRID SCALE DESCRIPTION

0001 39° 38' 03.21581" N 106° 05' 23.07948" W 801181.547 803751.001 2786.529 2789.093 -0° 22' 19.00405" 0.9999673905 OVERLOOK 1993 (NGS PID AA5369)

0002 39° 29' 10.77095" N 106° 03' 08.25642" W 488441.984 896890.139 2956.438 2959.036 -0° 20' 53.97256" 0.999958472 FERRIS 1998 (NGS PID AH5680)

0003 39° 31' 23.18370" N 106° 02' 44.53913" W 492521.976 867481.414 2822.559 2835.175 -0° 20' 39.01431" 0.999962990 USCGS BM 1299 1951 (NGS PID KL0013)

0879 39° 29' 51.08844" N 106° 02' 46.62885" W 489682.187 867414.426 2872.451 2885.064 -0° 20' 40.33227" 0.999959804 SH 9 CM-MP 87.92 CDOT Type 2

0881 39° 30' 02.01351" N 106° 02' 48.98405" W 490019.439 867360.183 2867.308 2879.915 -0° 20' 41.81768" 0.999960171 SH 9 CM-MP 88.13 CDOT Type 2

0883 39° 30' 12.16293" N 106° 02' 60.67475" W 490332.675 867321.677 2866.643 2879.258 -0° 20' 42.88398" 0.999960515 SH 9 CM-MP 88.33 CDOT Type 2

0885 39° 30' 20.75121" N 106° 02' 52.00516" W 490597.717 867291.490 2862.355 2874.973 -0° 20' 43.72306" 0.999960808 SH 9 CM-MP 88.49 CDOT Type 2

0887 39° 30' 30.07223" N 106° 02' 53.06652" W 490885.316 867267.869 2852.141 2864.756 -0° 20' 44.39244" 0.999961128 SH 9 CM-MP 88.67 CDOT Type 2

0888 39° 30' 38.29281" N 106° 02' 55.60225" W 491139.193 867208.626 2851.303 2863.920 -0° 20' 45.99170" 0.999961412 SH 9 CM-MP 88.84 CDOT Type 2

0889 39° 30' 49.17301" N 106° 02' 56.22627" W 491474.813 867195.947 2843.996 2856.814 -0° 20' 46.38527" 0.999961790 SH 9 CM-MP 88.99 CDOT Type 2

0892 39° 30' 59.98418" N 106° 02' 53.27601" W 491807.790 867268.430 2835.223 2847.842 -0° 20' 44.52457" 0.999962168 SH 9 CM-MP 89.17 CDOT Type 2

0894 39° 31' 09.38926" N 106° 02' 51.12363" W 492097.520 867321.589 2830.756 2843.376 -0° 20' 43.16709" 0.999962500 SH 9 CM-MP 89.36 CDOT Type 2

0895 39° 31' 19.42638" N 106° 02' 48.24223" W 492406.636 867392.274 2826.532 2839.153 -0° 20' 41.34982" 0.999962856 SH 9 CM-MP 89.50 CDOT Type 2

0896 39° 31' 26.29595" N 106° 02' 46.00153" W 492618.163 867447.064 2819.727 2832.347 -0° 20' 39.93663" 0.999963101 SH 9 CM-MP 89.60 CDOT Type 2

0899 39° 31' 36.87639" N 106° 02' 43.37218" W 492944.073 867511.819 2813.304 2826.926 -0° 20' 38.27833" 0.999963480 SH 9 CM-MP 89.90 CDOT Type 2

0901 39° 31' 47.68972" N 106° 02' 40.96478" W 493277.199 867571.312 2807.021 2819.642 -0° 20' 36.76001" 0.999963871 SH 9 CM-MP 90.09 CDOT Type 2

0903 39° 31' 56.89607" N 106° 02' 38.44049" W 493560.442 867633.294 2802.570 2815.190 -0° 20' 35.16795" 0.999964205 SH 9 CM-MP 90.28 CDOT Type 2

0905 39° 32' 06.28633" N 106° 02' 35.49107" W 493849.720 867753.219 2796.752 2809.373 -0° 20' 32.04642" 0.999964549 SH 9 CM-MP 90.46 CDOT Type 2

0906 39° 32' 15.84462" N 106° 02' 33.15786" W 494144.347 867762.936 2791.879 2804.495 -0° 20' 31.83626" 0.999964901 SH 9 CM-MP 90.64 CDOT Type 2

0908 39° 32' 26.28922" N 106° 02' 29.74774" W 494465.960 867846.284 2784.893 2797.504 -0° 20' 29.68533" 0.999965288 SH 9 CM-MP 90.85 CDOT Type 2

0910 39° 32' 37.33539" N 106° 02' 28.46471" W 494806.430 867878.949 2782.019 2794.629 -0° 20' 28.87634" 0.999965700 SH 9 CM-MP 91.03 CDOT Type 2

0912 39° 32' 47.84565" N 106° 02' 24.38037" W 495129.074 867978.395 2776.832 2789.437 -0° 20' 26.30039" 0.999966095 SH 9 CM-MP 91.24 CDOT Type 2

0915 39° 32' 58.63223" N 106° 02' 28.19114" W 495463.183 867989.394 2774.562 2787.163 -0° 20' 28.70360" 0.999966502 SH 9 CM-MP 91.46 CDOT Type 2

0916 39° 33' 05.88760" N 106° 02' 35.39268" W 495687.937 867718.799 2769.299 2781.901 -0° 20' 33.24574" 0.999966779 SH 9 CM-MP 91.63 CDOT Type 2

0918 39° 33' 13.34609" N 106° 02' 42.83445" W 495919.014 867542.517 2765.148 2777.749 -0° 20' 37.93919" 0.999967063 SH 9 CM-MP 91.81 CDOT Type 2

0920 39° 33' 21.26803" N 106° 02' 53.68038" W 496164.877 867265.066 2760.204 2772.805 -0° 20' 44.77960" 0.999967367 SH 9 CM-MP 92.03 CDOT Type 2

0922 39° 33' 27.78320" N 106° 03' 00.89248" W 496366.839 867714.114 2757.538 2770.141 -0° 20' 49.32819" 0.999967618 SH 9 CM-MP 92.19 CDOT Type 2

0924 39° 33' 39.05498" N 106° 03' 04.13251" W 496714.906 867038.878 2752.930 2765.542 -0° 20' 51.37165" 0.999968055 SH 9 CM-MP 92.41 CDOT Type 2

0926 39° 33' 48.54981" N 106° 03' 06.82739" W 497008.078 866983.490 2748.928 2761.531 -0° 20' 52.88207" 0.999968428 SH 9 CM-MP 92.60 CDOT Type 2

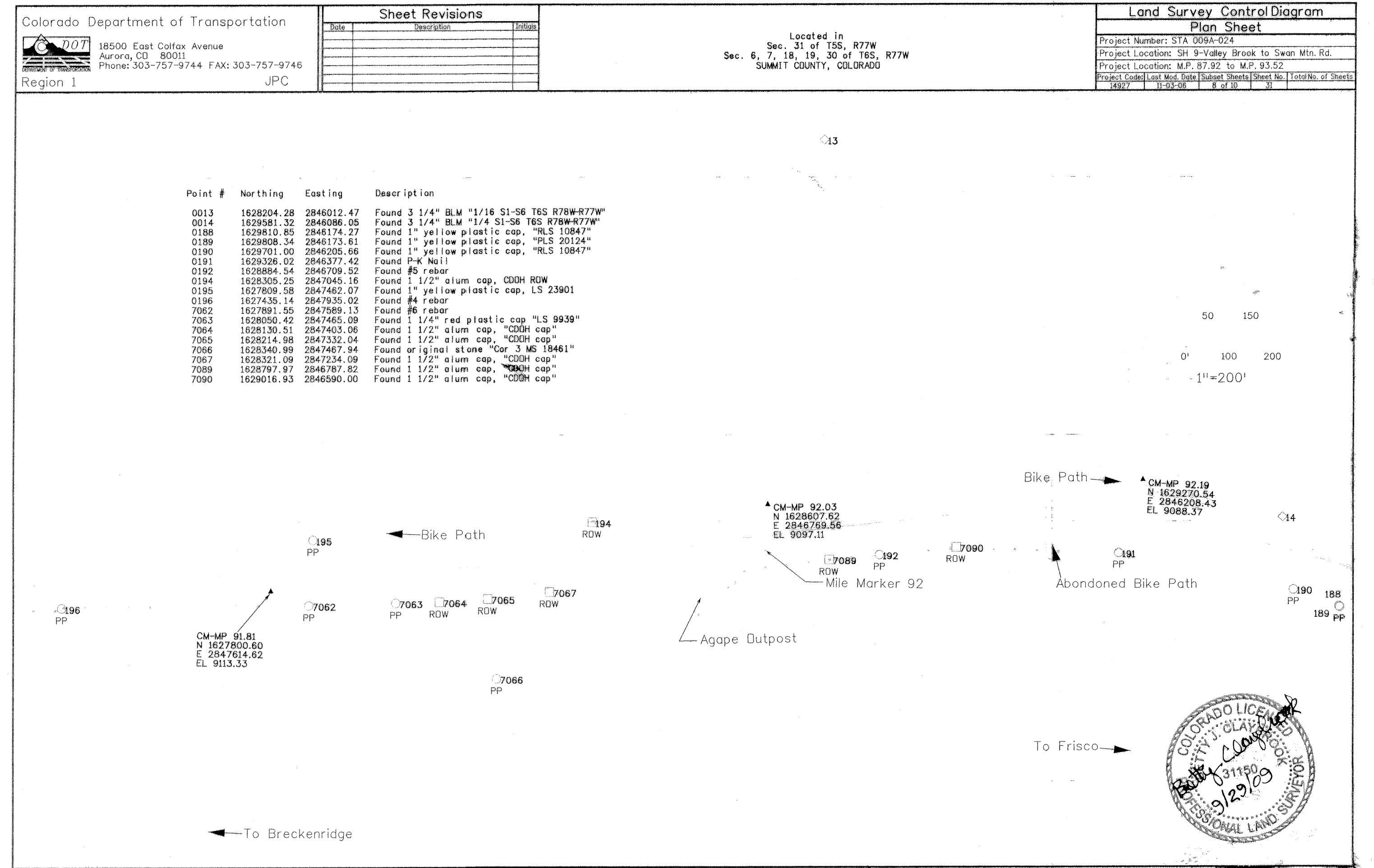
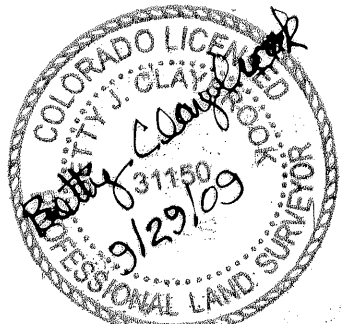
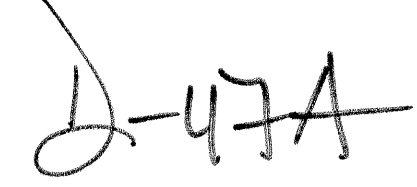
0928 39° 33' 57.83138" N 106° 03' 08.83058" W 497294.647 866930.254 2745.799 2758.404 -0° 20' 54.33466" 0.999968789 SH 9 CM-MP 92.78 CDOT Type 2

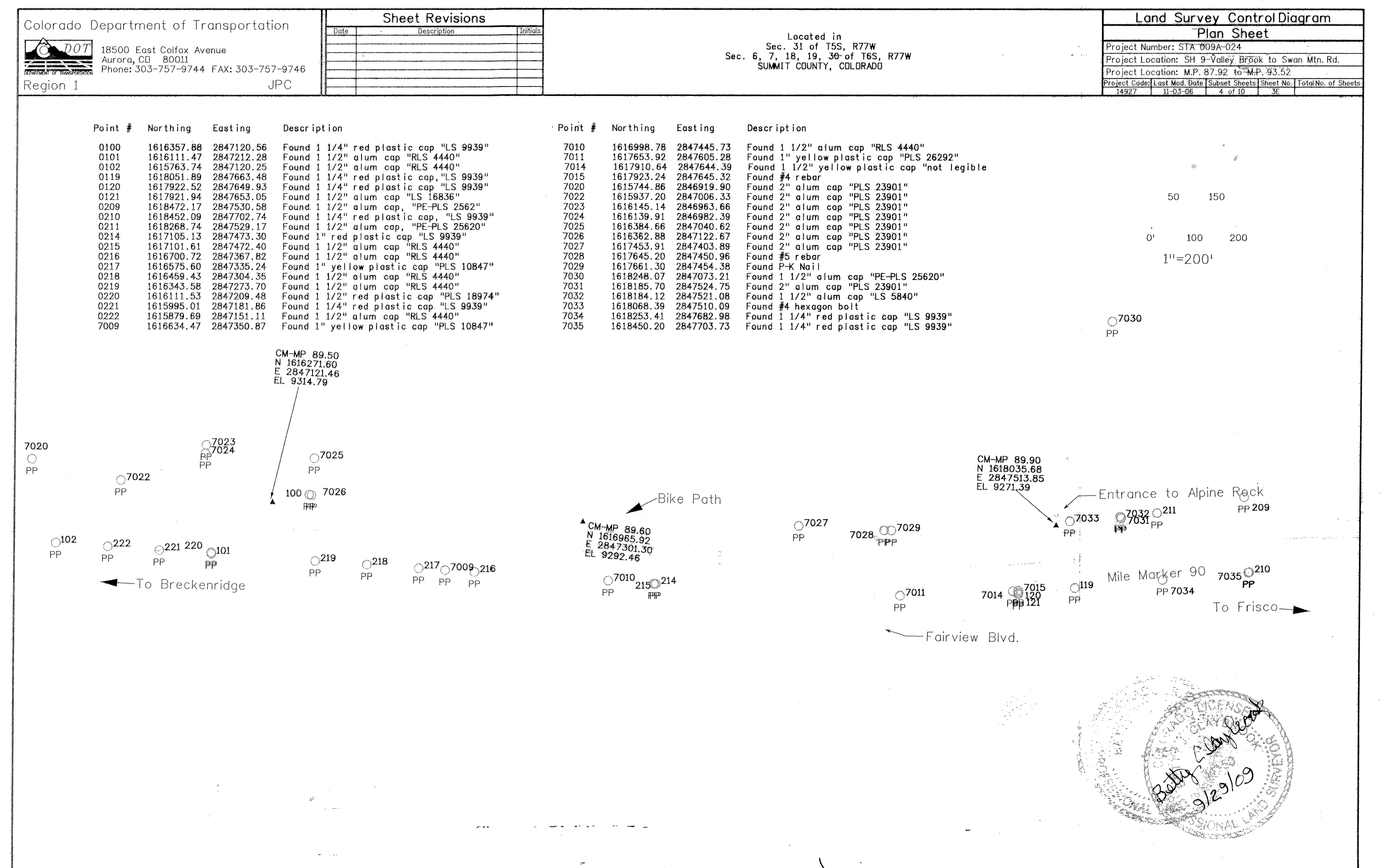
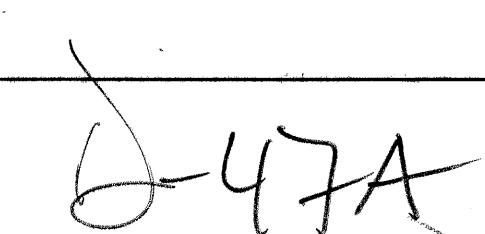
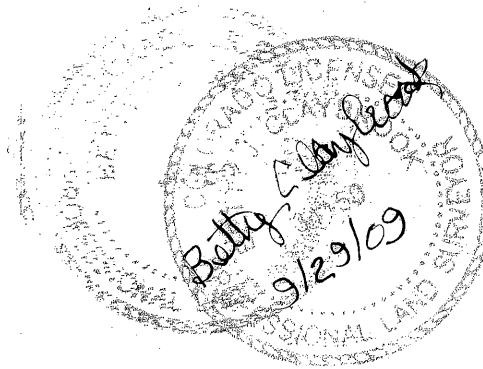
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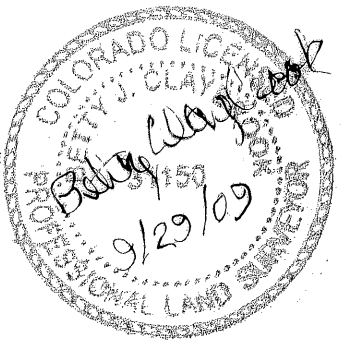
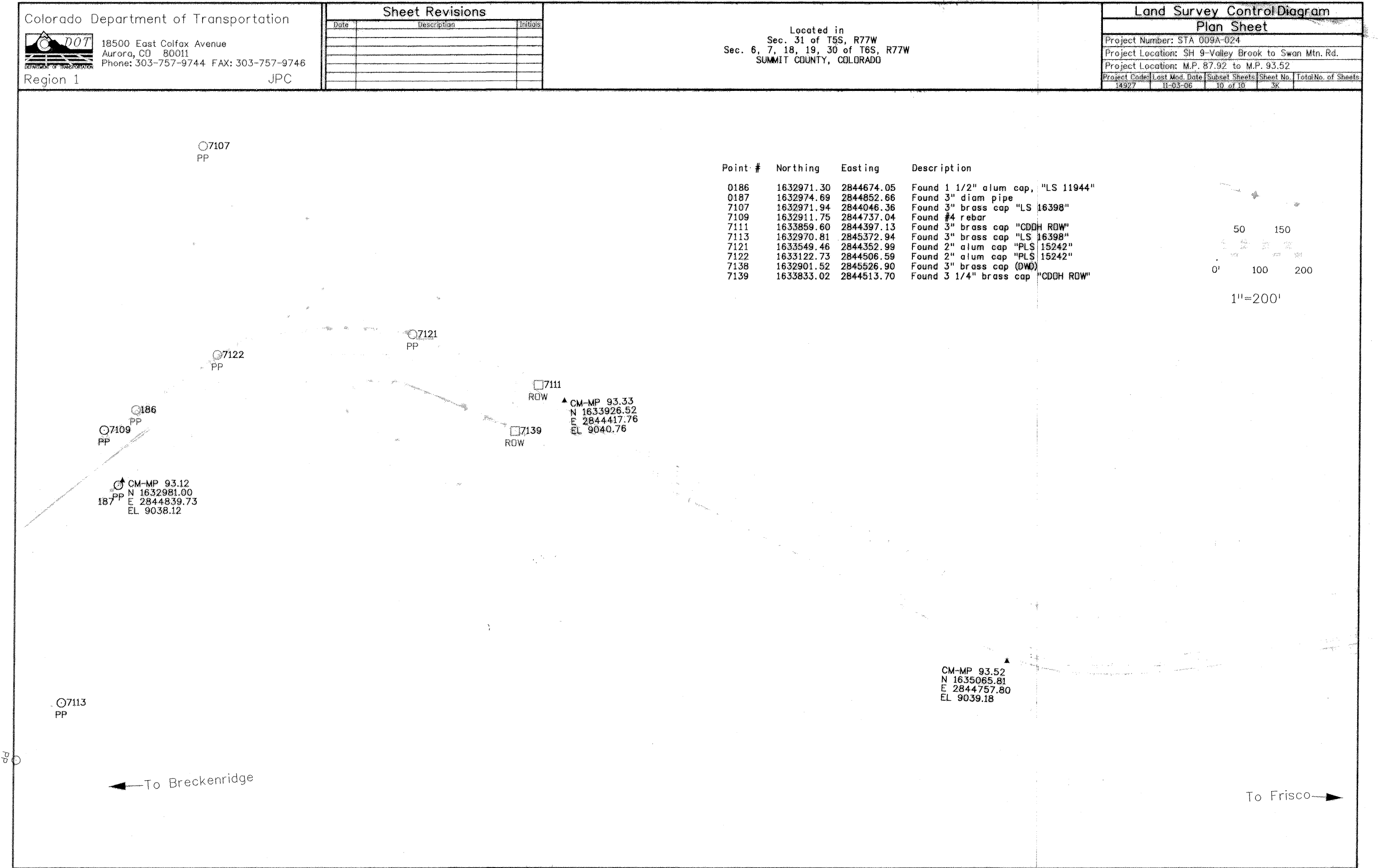
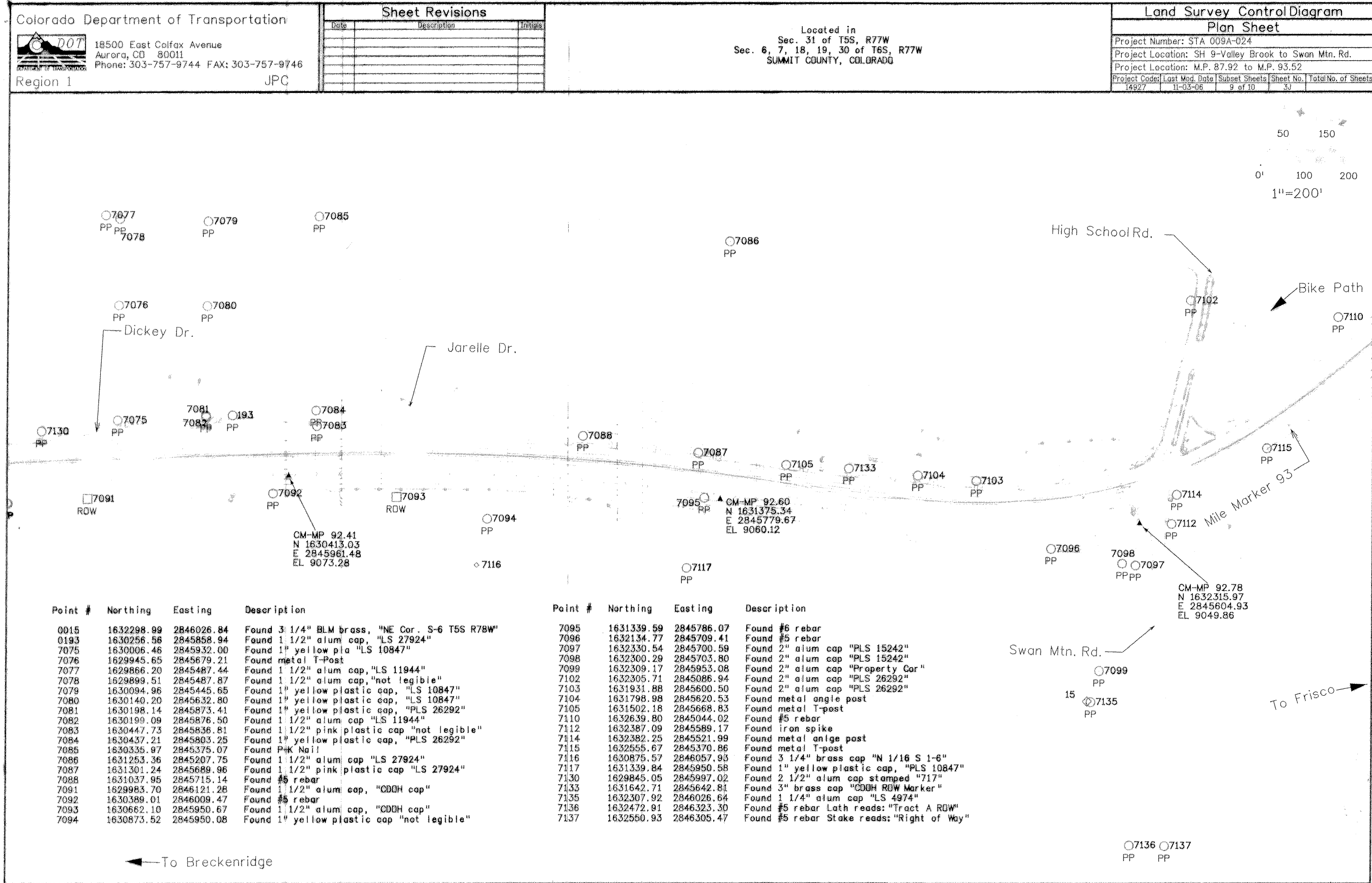
0933 39° 34' 13.66960" N 106° 03' 24.10872" W 497785.310 866568.577 2743.022 2755.629 -0° 21' 03.97043" 0.999969415 SH 9 CM-MP 93.33 CDOT Type 2

STATE OF COLORADO
COUNTY OF SUMMIT
I hereby certify that the foregoing
is a true and correct copy of the
original as filed in my office.
Recorder
Betty J. Claybrook
Deputy

J-47A







D-47A