

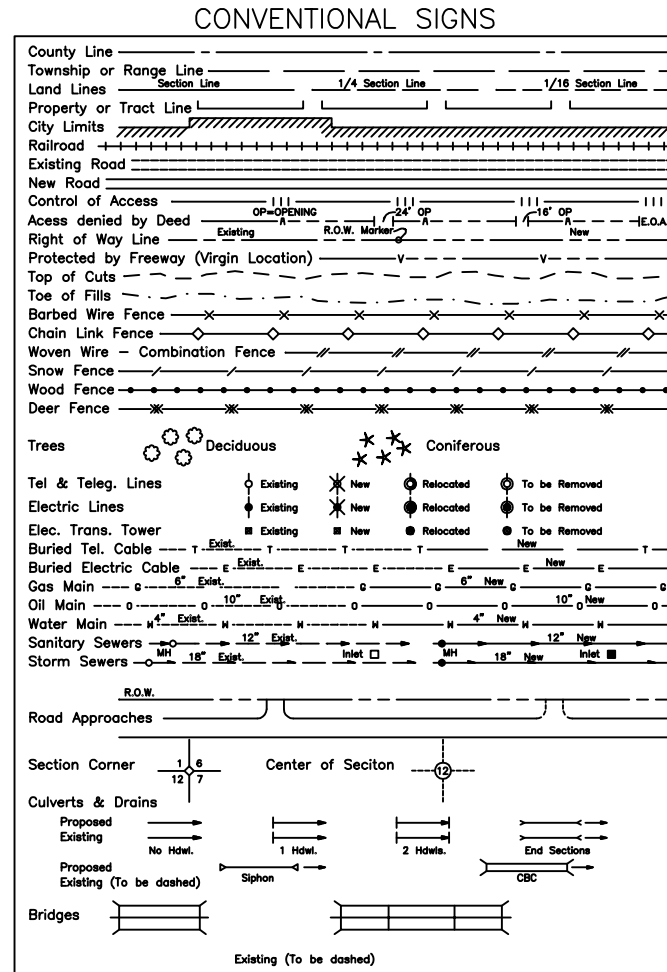


Region 1
18500 East Colfax Avenue
Aurora, CO 80011
Phone: (303) 757-9117 Fax: (303) 757-9746

Right of Way Unit: Kevin Williams

Sheet Revisions			Sheet Revisions			Sheet Revisions		
mm/yy	XXXXX	XXX	mm/yy	XXXXX	XXX	mm/yy	XXXXX	XXX

Right of Way Plans				
Title Sheet				
Project Number: SHE 105A-011				
Project Location: SH 105 CURVE REALIGNMENT				
Project Location:				
Project Code	Last Mod. Date	Subset Sheets	Sheet No.	Total No. of Sheets
14513	10/16/2003	1 of 1	1	6



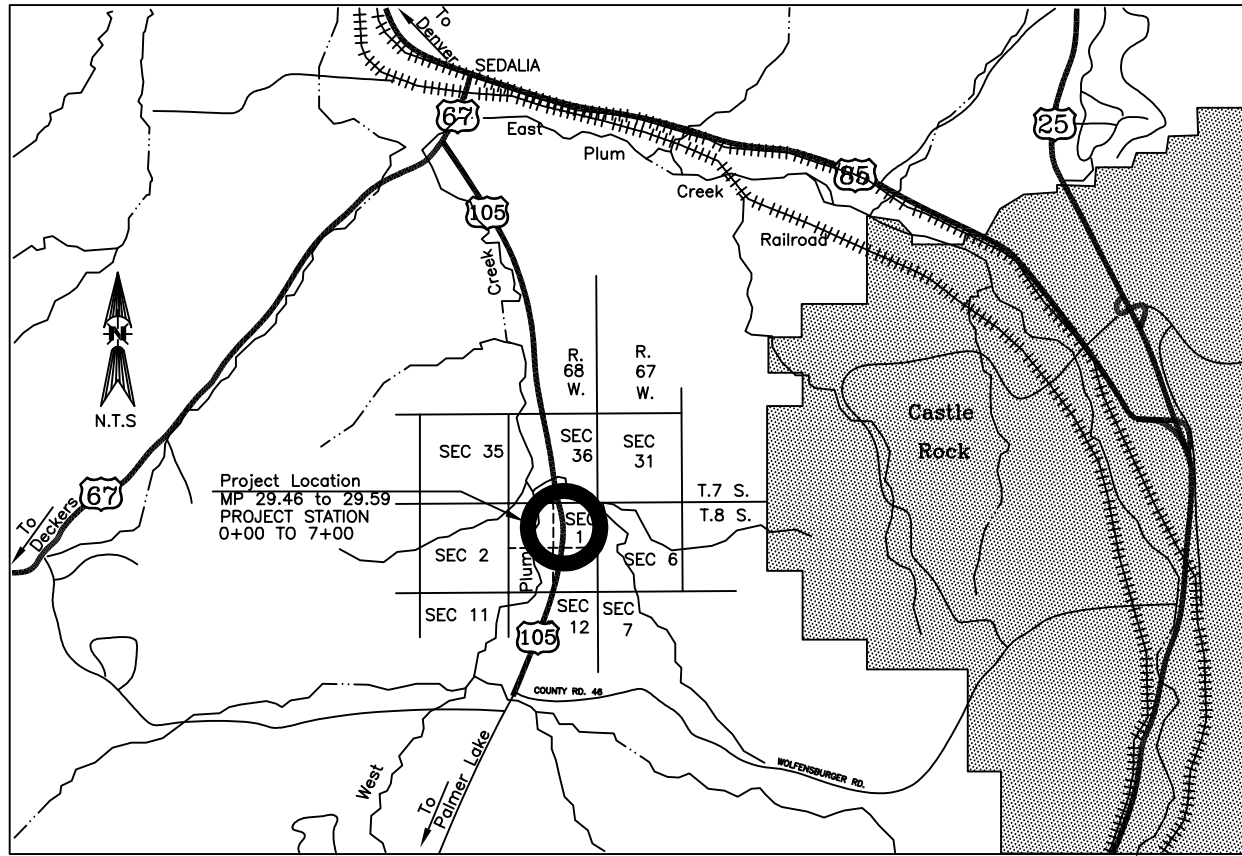
DEPARTMENT OF TRANSPORTATION STATE OF COLORADO

RIGHT OF WAY PLAN OF PROPOSED FEDERAL AID PROJECT NO. SHE 105A-011 STATE HIGHWAY NO. SH 105 Douglas County RIGHT OF WAY

SCALES OF ORIGINAL DRAWINGS
PLAN SHEETS : 1"=50'
OWNERSHIP MAP: NA
R.O.W. LENGTH OF PROJECT:700FT.

INDEX OF SHEETS

1	Title Sheet
2	Tabulation of Properties
3-3A	Survey Control Diagram
4	Monumentation Sheets
5	Plan Sheets
6	Ownership Map N.A. See Plan Sheet



CDOT CM-MP 29.40
S 07°01'47" W
CDOT CM-MP 29.25

BASIS OF BEARINGS
All bearings are based on the line between SH 105 CM-MP 29.4 (A CDOT Type II Monument) and CDOT CM-MP 29.25 (A CDOT Type II Monument) that bearing being S 07°01'47" W

REGION 1
PROJECT CODE:14513
DATE: 10/03

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

AUTHORIZED: _____ DATE _____

DIVISION ADMINISTRATOR

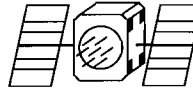


Region: 1
 Address: 18500 East Colfax Avenue
 City: Aurora, Colorado 80011
 Phone: (303) 757-9744 FAX: (303) 757-9128

Survey Unit: Joseph P. Conway

Sheet Revisions

mm/yy	XXXX	XXX



SH 105 MP 29 to MP 30
 Located in
 Section 36, Township 7 South, Range 68 West
 Section 1, Township 8 South, Range 68 West
 of the 6th Principal Meridian
 County of Douglas
 State of Colorado



Land Survey Control Diagram

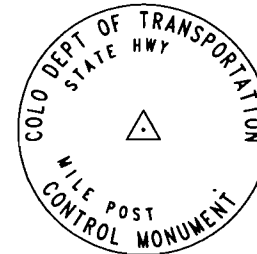
Title Sheet

Project Number: SHE 105A-011				
Project Location: Curtis Curve - 3 Miles South of Sedalia				
Project Location: SH105 MP 29 to MP 30				
Project Code:	Last Mod. Date	Subset Sheets	Sheet No.	Total No. of Sheets
14513	08-21-03	1 of 2	1	2

LAND SURVEY CONTROL DIAGRAM

GEODETTIC COORDINATE SUMMARY TABLE (ADJUSTED FIELD DATA)

POINT NAME	GEODETTIC COORDINATES NAD-83(92) (CHARN)		ELLIP. HEIGHT	ELEV. (NAVD '88)	MAPPING ANGLE	SCALE	NAD 83(92) ZONE 0502	
	LATITUDE(N)	LONGITUDE(W)					NORTHING (m)	EASTING (m)
CHARN "K 23"	39° 25' 41.15066"	104° 54' 30.69573"	1807.508	1824.181	0° 22' 22.92996"	0.999952163	481998.926	965326.062
CHARN "CHASE"	39° 24' 45.78867"	104° 57' 11.71232"	1769.010	1785.470	0° 20' 41.37848"	0.999950670	480267.560	961485.528
CHARN "MAAG"	39° 22' 38.82467"	104° 54' 59.68310"	1928.359	1944.903	0° 22' 04.64793"	0.999947517	476371.949	964668.921
SH105 CM-MP 29.95	39° 23' 42.98919"	104° 57' 00.29241"	1783.585	1800.019	0° 20' 48.58090"	0.999949063	478332.619	961770.425
SH105 CM-MP 29.80	39° 23' 33.93080"	104° 56' 59.07290"	1784.605	1801.034	0° 20' 49.35003"	0.999948838	478053.457	961801.296
SH105 CM-MP 29.60	39° 23' 25.45322"	104° 56' 53.63777"	1784.977	1801.403	0° 20' 52.77791"	0.999948630	477792.818	961932.933
SH105 CM-MP 29.40	39° 23' 13.07507"	104° 56' 54.15179"	1790.967	1807.392	0° 20' 52.45372"	0.999948330	477411.031	961922.952
SH105 CM-MP 29.25	39° 23' 05.42719"	104° 56' 55.42787"	1796.525	1812.935	0° 20' 51.64891"	0.999948146	477175.004	961893.847



Typical Control Monument Cap
Not to Scale

BASIS OF BEARINGS: All bearings are grid bearings of the Colorado State Plane Coordinate System, Central Zone (502), North American Datum (1983). Bearings are derived from a GPS Fast Static Control Survey, occupying "CHARN" points Chase, Maag, K 23 and project control points (as listed). The basis of grid bearing is the line between SH105 CM-MP 29.40 (CDOT Type II) to SH105 CM-MP 29.25 (CDOT Type II). That bearing being S07°01'47"W.

BASIS OF ELEVATIONS: The project is based on a NAVD 88 elevation of 1,824.181m (5984.8338') derived from NGS POINT K 23. The difference in elevation was transferred from NGS K 23 to project control point SH105 CM-MP 29.40 by means of a GPS Fast Static Control Survey, then transferred to the remaining project control points by means of a conventional leveling loop. Elevations are only accurate to +/- 10 cm relative to K 23.

COORDINATE DATUM: Coordinates on this project are for the exclusive use of the CDOT for the construction of this project and are considered Project Coordinates only. A combined factor of (1.000335334) was used to convert from truncated State Plane coordinates to Project coordinates. Then the coordinates were converted to U.S. Survey feet using (3.280833333).



CP - Control Point Monuments 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.

NOTE: This control survey is for the use of the 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 restriction, 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, Daniel P. Wilmeth, a Professional Land Surveyor in the State of Colorado, hereby state that this Land Survey Control Diagram was prepared under my supervision this 21st day of August, 2003 from a field survey performed under my direct supervision 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 Control Survey and this topographic survey, as shown, meets the minimum horizontal control tolerances of a Type D Topographic Survey as listed in the Colorado Department of Transportation Survey Manual Chapter Three (Revised 4/29/92).

PROJECT COORDINATE SUMMARY TABLE (ADJUSTED FIELD DATA IN METERS)

POINT NAME	PROJECT COORDINATES		ELEV(m)	DESCRIPTION
	NORTH (m)	EAST (m)		
2960 SH105 CM-MP 29.60	477953.037	962255.502	1801.403	CDOT Type II Control Monument
2940 SH105 CM-MP 29.40 (GPS ELEV)	477571.123	962245.517	1807.392	CDOT Type II Control Monument
2925 SH105 CM-MP 29.25	477335.017	962216.402	1812.935	CDOT Type II Control Monument
2980 SH105 CM-MP 29.80	478213.764	962123.820	1801.034	CDOT Type II Control Monument
1111 CHARN "CHASE"	480428.609	961807.946	1785.470	Douglas County GIS Monument
2995 SH105 CM-MP 29.95	478493.020	962092.939	1800.019	CDOT Type II Control Monument

PROJECT COORDINATE SUMMARY TABLE (ADJUSTED FIELD DATA IN U.S. FEET)

POINT NAME	PROJECT COORDINATES		ELEV(ft)	DESCRIPTION
	NORTH (ft)	EAST (ft)		
2960 SH105 CM-MP 29.60	1568084.26	3156999.93	5910.10	CDOT Type II Control Monument
2940 SH105 CM-MP 29.40 (GPS ELEV)	1566831.26	3156967.17	5929.75	CDOT Type II Control Monument
2925 SH105 CM-MP 29.25	1566056.63	3156871.65	5947.94	CDOT Type II Control Monument
2980 SH105 CM-MP 29.80	1568939.66	3156567.90	5908.89	CDOT Type II Control Monument
1111 CHARN "CHASE"	1576206.20	3155531.57	5857.83	Douglas County GIS Monument
2995 SH105 CM-MP 29.95	1569855.85	3156466.58	5905.36	CDOT Type II Control Monument

CONSTRUCTION SURVEYING AND MONUMENTATION REQUIREMENTS:

- This 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.
- 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.
- 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.
- When installing Type 3-A monuments, a locking lid monument box is required. The space around the monument box shall be filled, compacted and patched with a permanent suitable roadway patching material, that will provide a positive moisture barrier between the monument box and the edges of asphalt/concrete.
- Control survey procedures, statistical analysis, and accuracy obtained for horizontal and vertical control shall be documented in the field book.
- Legible copies of the field books shall be submitted to the Project Engineer for review on a monthly basis.
- 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.
- 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.
- Whenever the contract includes the setting of CDOT Type II monuments, a Survey Control Diagram, signed and sealed by the P.L.S. in responsible charge, shall be submitted to the Engineer. An AutoCad drawing on CD shall accompany the hard copy.

Daniel P. Wilmeth, PLS 25384
 For and on behalf of The
 Colorado Department of Transportation

Date:

FILED FOR INFORMATION
 DEPOSITED THIS DAY OF 19__ AT ___ M., FOR INFORMATION
 ONLY IN BOOK OF THE COUNTY LAND SURVEYS/RIGHT OF WAY
 SURVEYS AT PAGE _____ RECEPTION NUMBER _____
 SIGNED _____ DEPT. _____

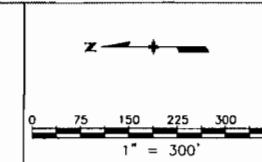


Region: 1
Address: 18500 East Colfax Avenue
City: Aurora, Colorado 80011
Phone: (303)757-9744 FAX: (303) 757-9128

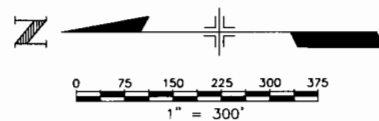
Survey Unit: Joseph P. Conway

Sheet Revisions		
mm/yy	xxxxx	xxx

SH 105 MP 29 to MP 30
Located in
Section 36, Township 7 South, Range 68 West
Section 1, Township 8 South, Range 68 West
of the 6th Principal Meridian
County of Douglas
State of Colorado



Survey Control Diagram				
Plan Sheet				
Project Number: SHE 105A-011				
Project Location: Curtis Curve - 3 miles South of Sedalia				
Project Code: SH105 MP 29 to MP 30				
Project Code	Last Mod. Date	Subset Sheets	Sheet No.	Total No. of Sheets
14513	08-21-03	2 of 2	1	2



SE 1/4
SECTION 36
T.7S., R.68W.

NE 1/4
SECTION 1
T.8S., R.68W.



FOUND: STEEL CAP ANCHOR (CAP DESTROYED)
IN 6" DIA. CONC. POST (STA. 13+00)
STATE HIGHWAY DEPT. ROW MARKER
N: 1568719.56
E: 3156721.79

FOUND: 3 1/4" DIA. BRASS CAP
IN 6" DIA. CONC. POST (STA. PT 10+25.8)
STATE HIGHWAY DEPT. ROW MARKER
N: 1568983.96
E: 3156649.29

FOUND: 1 1/4" DIA. RED
PLASTIC CAP (STAMPED)
DAVID E. ARCHER - LS 6935
N: 1569275.19
E: 3156588.87

FOUND: 1 1/4" DIA. RED
PLASTIC CAP (STAMPED)
DAVID E. ARCHER - LS 6935
N: 1569278.31
E: 3156588.27

FOUND: 1 1/4" DIA. YELLOW
PLASTIC CAP (STAMPED)
ENGR. SERV. CO. PLS 27609
N: 1569689.96
E: 3156459.27

SET:
SH 105 CM-MP 29.95
GPS PROJECT STATION
N: 1569855.85
E: 3156466.58
EL: 5905.56

SET:
SH 105 CM-MP 29.80
GPS PROJECT STATION
N: 1568939.66
E: 3156567.90
EL: 5908.89

SET:
SH 105 CM-MP 29.60
GPS PROJECT STATION
N: 1568084.26
E: 3156999.93
EL: 5910.10

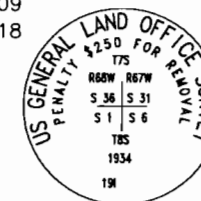
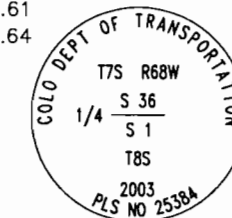
FOUND: 1 1/4" DIA. FADED
RED PLASTIC CAP (STAMPED)
DAVID E. ARCHER - LS 6935
N: 1568647.89
E: 3156741.74

FOUND:
#5 REBAR
N: 1568445.45
E: 3156810.22

FOUND: 3 1/4" DIA. BRASS CAP
IN 6" DIA. CONC. POST (STA. 13+00)
STATE HIGHWAY DEPT. ROW MARKER
N: 1568694.57
E: 3156635.37

FOUND: 3 1/4" DIA. BRASS CAP
IN 6" DIA. CONC. POST (STA. PT 10+25.8)
STATE HIGHWAY DEPT. ROW MARKER
N: 1568959.96
E: 3156563.59

FOUND: 1 1/2" DIA. ALUM. CAP (STAMPED) ZBS 11434
UP-GRADED: 3 1/4" DIA. ALUM. CAP (STAMPED) AS SHOWN
N: 1568440.61
E: 3156018.64



FOUND: 3 1/2" DIA. BRASS CAP (STAMPED) AS SHOWN
0.5' WEST OF A 4"X8"X11" POSSIBLE ORIGINAL STONE
N: 1568457.09
E: 3158654.18

T.7S., R.68W.
T.8S., R.68W.

FOUND: 60 CD NAIL AT
BOUNDARY ANGLE POINT
DAVID E. ARCHER SURVEY
N: 1568080.70
E: 3157004.46

FOUND: 60 CD NAIL AT
BOUNDARY ANGLE POINT
DAVID E. ARCHER SURVEY
N: 1567665.19
E: 3157058.41

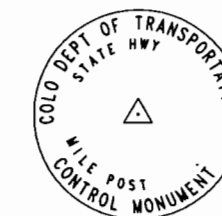
FOUND: 60 CD NAIL AT
BOUNDARY ANGLE POINT
DAVID E. ARCHER SURVEY
N: 1567322.03
E: 3157076.28

FOUND: 60 CD NAIL AT
BOUNDARY ANGLE POINT
DAVID E. ARCHER SURVEY
N: 1566821.54
E: 3157024.30

FOUND: 60 CD NAIL AT
BOUNDARY ANGLE POINT
DAVID E. ARCHER SURVEY
N: 1566365.33
E: 3156966.83

SET:
2940
GPS PROJECT STATION
N: 1566831.26
E: 3156967.17
EL: 5929.75 (GPS ELEV)

SET:
2925
GPS PROJECT STATION
N: 1566056.63
E: 3156871.65
EL: 5947.94



Typical Control Monument Cap NOT TO SCALE

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.

SW 1/4
SECTION 36
T.7S., R.68W.

NW 1/4
SECTION 1
T.8S., R.68W.

DEPOSITED THIS DAY OF 19 AT M., FOR INFORMATION ONLY IN BOOK OF THE COUNTY LAND SURVEYS/RIGHT OF WAY SURVEYS AT PAGE RECEPTION NUMBER

SIGNED DEPT.

41513JLSCD.dwg 19 AUG 2003 09:45:38.9 PLOT/EDIT by DPW



Region 1
18500 East Colfax Avenue
Aurora, CO 80011
Phone: (303) 757-9117 Fax: (303) 757-9746

Right of Way Unit: Kevin Williams

Sheet Revisions			Sheet Revisions			Sheet Revisions		
mm/dt/yy	XXXXX	XXX	mm/dt/yy	XXXXX	XXX	mm/dt/yy	XXXXX	XXX

Right of Way Plans				
Monumentation Sheet				
Project Number: SHE 105A-011				
Project Location: SH 105 CURVE REALIGNMENT				
Project Location:				
Project Code:	Last Mod. Date	Subset Sheets	Sheet No.	Total No. of Sheets
14513	10/16/2003	1 of 1	4	6

TABULATION OF R.O.W. MARKERS TO BE SET BY STATE FORCES

POINT NO.	NORTHING	EASTING
102	1567757.37	3156986.54
103	1567947.65	3156936.19
105	1568125.01	3156898.71
108	1568305.35	3156821.07
202	1567763.22	3157046.25
209	1568080.70	3157004.46
216	1568333.66	3156873.97

TABULATION OF SURVEY CONTROL POINTS TO BE SET OR RESET

POINT NO.	NORTHING	EASTING

TABULATION OF R.O.W. MARKERS TO BE RESET AFTER CONSTRUCTION

POINT NO.	NORTHING	EASTING

TABULATION OF PERMANENT EASEMENT MARKERS TO BE SET

POINT NO.	NORTHING	EASTING

TABULATION OF ALIQUOT CORNERS TO BE RESET

POINT NO.	NORTHING	EASTING

TABULATION OF TEMPORARY EASEMENT POINTS TO BE STAKED

POINT NO.	NORTHING	EASTING

GENERAL NOTES

1. This Right of Way plan is not a complete boundary survey of all adjoining owners and is prepared for Transportation Department purposes Only.
2. Survey Control Points set with a higher degree of accuracy than ROW Markers.
3. 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.
4. All R.O.W. Markers set from survey control points.
5. All centerline and offset stationing is theoretical only and may not represent the centerline as constructed in the field. All stationing is approximate.
6. All coordinates listed are project coordinates only.
7. Field survey control precision computed to exceed 1/20,000.

QUANTITY OF MONUMENTS TO BE SET

CAP TYPE	MONUMENT TYPE							
	1	1A	2	2A	3	3A	4	5
REFERENCE								
RIGHT OF WAY	7							
CONTROL								
ALIQUOT CORNER								
WITNESS POST								

SURVEYOR CERTIFICATE (FIELD)

Control Survey and Monumentation was done under my supervision and checking.

NAME _____ P.L.S. NO. _____

DATE _____

SURVEYOR CERTIFICATE (OFFICE)

R.O.W. Plans and Legal Descriptions were prepared under my supervision and checking.

NAME _____ P.L.S. NO. _____

DATE _____



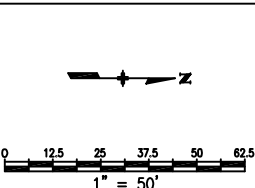
Region 1
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Phone: (303) 757-9744 Fax: (303) 757-9746

Right of Way Unit: Kevin Williams

Sheet Revisions	
mm/dd/yy	xxxxx

Sheet Revisions	
mm/yy	xxxxx

Sheet Revisions	
mm/yy	xxxxx



Right of Way Plans				
Plan Sheet				
Project Number: SHE 105A-011				
Project Location: SH 105 CURVE REALIGNMENT				
Project Location:				
Project Code	Last Mod. Date	Subset Sheets	Sheet No.	Total No. of Sheets
14513	10/16/2003	1 of 1	5	6

T. 8 S., R. 68 W., 6TH P.M.

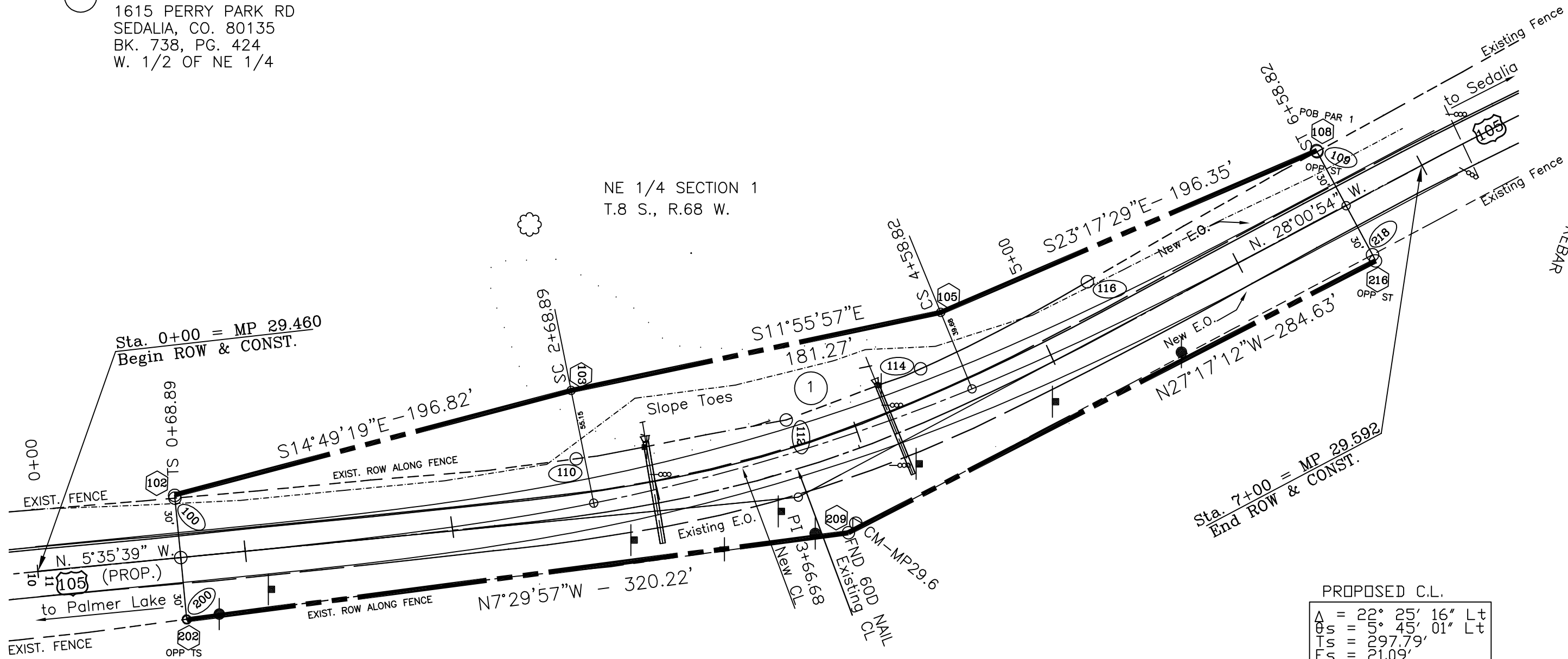
NE 1/4
SEC. 1

1

Curtis Family Partnership
CARE OF:
DAVID A CURTIS
1615 PERRY PARK RD
SEDALIA, CO. 80135
BK. 738, PG. 424
W. 1/2 OF NE 1/4

NE 1/4 SECTION 1
T.8 S., R.68 W.

NE 1/4 SECTION 1
T.8 S., R.68 W.



PROPOSED C.L.

Δ	=	22° 25' 16"	Lt
θ_s	=	5° 45' 01"	Lt
Ts	=	297.79'	
Es	=	21.09'	
Ls	=	200.00'	
Lt	=	133.40'	
St	=	66.73'	
Δ	=	10° 55' 17"	Lt
Dc	=	5° 45' 01"	
Tc	=	95.25'	
Lc	=	189.93'	
Rc	=	996.45'	

N89°38'30"E
 FOUND #5 REBAR
 TOWNSHIP/SECTION LINE
 SECTION 1 T.8 S., R.68 W., 6TH PM

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COLORADO DEPARTMENT OF TRANSPORTATION



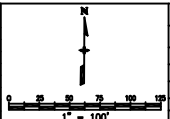
Region 1
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Right of Way Unit: **Kevin Williams**

Sheet Revisions		
REV	DATE	DESCRIPTION

Sheet Revisions		
REV	DATE	DESCRIPTION

Sheet Revisions		
REV	DATE	DESCRIPTION



Right of Way Plans				
Ownership Map				
Project Number: SHE 105A-011				
Project Location: CURVE REALIGNMENT AT M.P. 29.6				
Project Location: Line 2 Project Location				
Project Code	Last Mod. Date	Subest Sheets	Sheet No.	Total No. of Sheets
14513	09/11/2003	XXX of XXX	6	6

T. 7 S., R. 68 W., 6TH P.M.

SE 1/4
SEC. 36

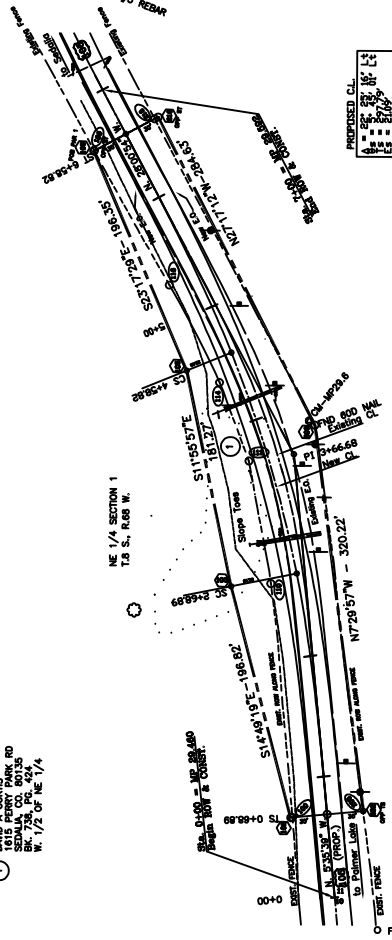
1/4 CORNER
SECTION 36
T. 7 S., R. 68 W.
999

1/4 CORNER
SECTION 1
T. 8 S., R. 68 W.

T. 8 S., R. 68 W.,
W 1/2
NE 1/4
SEC. 1

APPROX. 1/16
CORNER

TOWNSHIP/SECTION LINE
SECTION 1 T. 8 S., R. 68 W., 6TH PM



E 1/2
NE 1/4
SEC. 1

Circle Family Partnership
CARE OF:
FRANK PARK RD
SEWALLA, CO. 80135
W. 1/2 OF NE 1/4