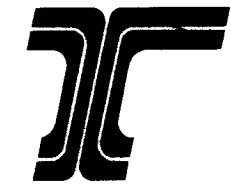
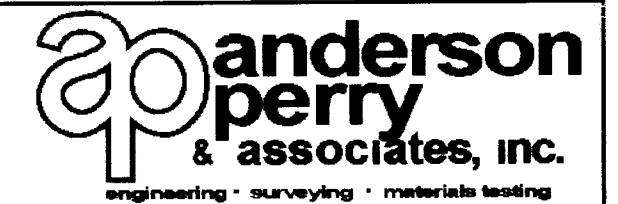


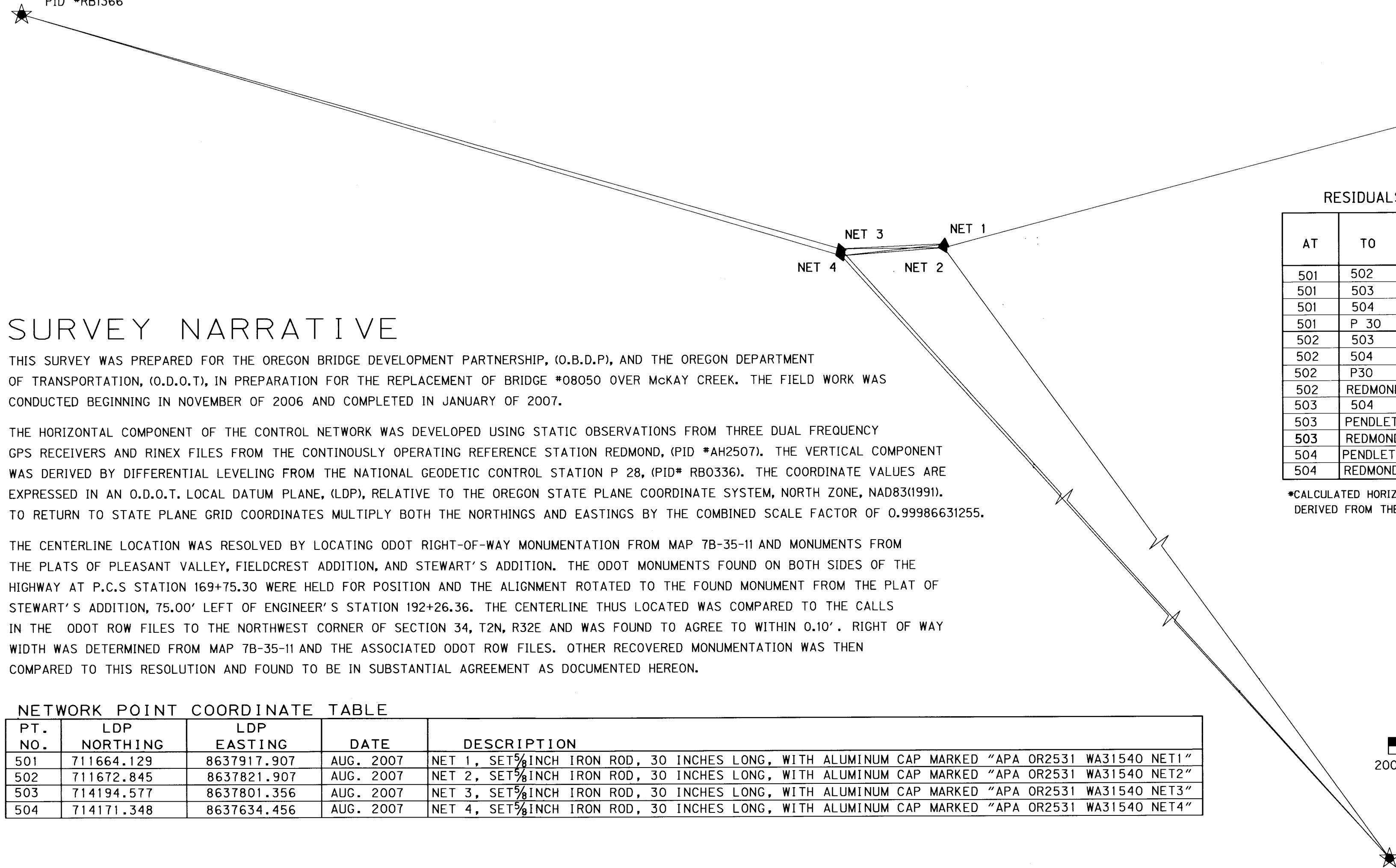
SEC. 34, T. 02 N., R. 32 E., W.M.



BEARINGS ARE BASED UPON THE OREGON STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83. AS DETERMINED BY SATELLITE OBSERVATIONS FROM THE NGS CONTROL STATIONS SHOWN HEREON.

COOPERATIVE BASE NETWORK CONTROL STATION PENDLETON PID *RB1366

NGS CONTROL STATION P30 PID* RB0343



SURVEY NARRATIVE

THIS SURVEY WAS PREPARED FOR THE OREGON BRIDGE DEVELOPMENT PARTNERSHIP, (O.B.D.P), AND THE OREGON DEPARTMENT OF TRANSPORTATION, (O.D.O.T), IN PREPARATION FOR THE REPLACEMENT OF BRIDGE #08050 OVER MCKAY CREEK. THE FIELD WORK WAS CONDUCTED BEGINNING IN NOVEMBER OF 2006 AND COMPLETED IN JANUARY OF 2007.

THE HORIZONTAL COMPONENT OF THE CONTROL NETWORK WAS DEVELOPED USING STATIC OBSERVATIONS FROM THREE DUAL FREQUENCY GPS RECEIVERS AND RINEX FILES FROM THE CONTINUOUSLY OPERATING REFERENCE STATION REDMOND, (PID *AH2507). THE VERTICAL COMPONENT WAS DERIVED BY DIFFERENTIAL LEVELING FROM THE NATIONAL GEODETIC CONTROL STATION P 28, (PID* RB0336). THE COORDINATE VALUES ARE EXPRESSED IN AN O.D.O.T. LOCAL DATUM PLANE, (LDP), RELATIVE TO THE OREGON STATE PLANE COORDINATE SYSTEM, NORTH ZONE, NAD83(1991). TO RETURN TO STATE PLANE GRID COORDINATES MULTIPLY BOTH THE NORTHINGS AND EASTINGS BY THE COMBINED SCALE FACTOR OF 0.99986631255.

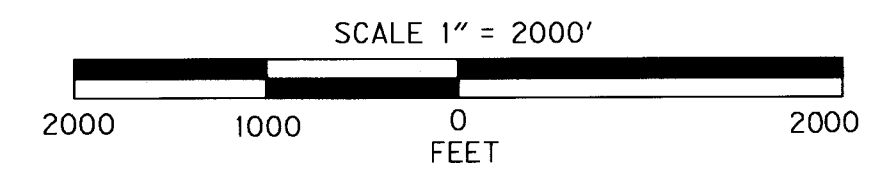
THE CENTERLINE LOCATION WAS RESOLVED BY LOCATING ODOT RIGHT-OF-WAY MONUMENTATION FROM MAP 7B-35-11 AND MONUMENTS FROM THE PLATS OF PLEASANT VALLEY, FIELDCREST ADDITION, AND STEWART'S ADDITION. THE ODOT MONUMENTS FOUND ON BOTH SIDES OF THE HIGHWAY AT P.C.S STATION 169+75.30 WERE HELD FOR POSITION AND THE ALIGNMENT ROTATED TO THE FOUND MONUMENT FROM THE PLAT OF STEWART'S ADDITION, 75.00' LEFT OF ENGINEER'S STATION 192+26.36. THE CENTERLINE THUS LOCATED WAS COMPARED TO THE CALLS IN THE ODOT ROW FILES TO THE NORTHWEST CORNER OF SECTION 34, T2N, R32E AND WAS FOUND TO AGREE TO WITHIN 0.10'. RIGHT OF WAY WIDTH WAS DETERMINED FROM MAP 7B-35-11 AND THE ASSOCIATED ODOT ROW FILES. OTHER RECOVERED MONUMENTATION WAS THEN COMPARED TO THIS RESOLUTION AND FOUND TO BE IN SUBSTANTIAL AGREEMENT AS DOCUMENTED HEREON.

RESIDUALS FOR ANGLES AND DISTANCES

AT	TO	GRID DISTANCE*	DISTANCE RESIDUAL	ANGLE RESIDUAL
501	502	96.38'	0.032'	0°01'08.2"
501	503	2532.79'	0.032'	0°00'02.4"
501	504	2522.85'	0.029'	0°00'02.3"
501	P 30	13,915.32'	0.039'	0°00'00.6"
502	503	2521.48'	0.027'	0°00'02.1"
502	504	2505.19'	0.027'	0°00'02.1"
502	P30	13,947.65'	0.039'	0°00'00.6"
502	REDMOND	780,944.36'	0.038'	0°00'00.0"
503	504	168.48'	0.023'	0°00'30.2"
503	PENDLETON	20,721.56'	0.041'	0°00'00.4"
503	REDMOND	782,528.02'	0.037'	0°00'00.0"
504	PENDLETON	20,790.95'	0.041'	0°00'00.4"
504	REDMOND	782,384.40'	0.038'	0°00'00.0"

*CALCULATED HORIZONTAL DISTANCE IN FEET DERIVED FROM THE MEASURED SLOPE DISTANCE

LEGEND	
▲	SET NETWORK POINT
★	FOUND GPS STATION
▲—▲	LINES OF OBSERVATION



NETWORK POINT COORDINATE TABLE

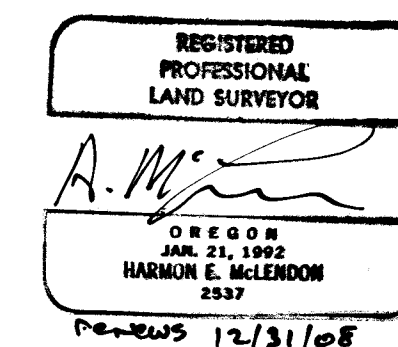
PT. NO.	LDP NORTHING	LDP EASTING	DATE	DESCRIPTION
501	711664.129	8637917.907	AUG. 2007	NET 1, SET 5/8 INCH IRON ROD, 30 INCHES LONG, WITH ALUMINUM CAP MARKED "APA OR2531 WA31540 NET1"
502	711672.845	8637821.907	AUG. 2007	NET 2, SET 5/8 INCH IRON ROD, 30 INCHES LONG, WITH ALUMINUM CAP MARKED "APA OR2531 WA31540 NET2"
503	714194.577	8637801.356	AUG. 2007	NET 3, SET 5/8 INCH IRON ROD, 30 INCHES LONG, WITH ALUMINUM CAP MARKED "APA OR2531 WA31540 NET3"
504	714171.348	8637634.456	AUG. 2007	NET 4, SET 5/8 INCH IRON ROD, 30 INCHES LONG, WITH ALUMINUM CAP MARKED "APA OR2531 WA31540 NET4"

MONUMENT INFORMATION

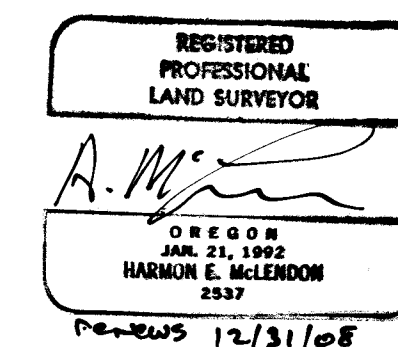
(GRID COORDINATES - OREGON COORDINATE SYSTEM NORTH ZONE) DATUM: NAD 83/91

STATION DESIGNATION	EASTING (ft) (GRID)	NORTHING (ft) (GRID)	LATITUDE (N)	LONGITUDE (W)	95% CONFIDENCE REGIONS					
					ELLIPSOID HT. NAVD88	ORTHO. ELEVATION	SEMI MAJOR AXIS	AZIMUTH	SEMI MINOR AXIS	HEIGHT
P30 (PID RB0343)	8640182.515	698080.313	45°34'07.38245"	118°47'21.19510"	1389.88'	1456.95'	*N/A	*N/A	*N/A	*N/A
PENDLETON	8642421.588	733999.653	45°40'01.47682"	118°46'38.96178"	1257.17'	1325.50'	*N/A	*N/A	*N/A	*N/A
REDMOND CORS	8032362.094	216912.732	44°15'35.14513"	121°08'52.31624"		3088.96'	*N/A	*N/A	*N/A	*N/A
NET 1	8636763.126	711568.988	45°36'21.24475"	118°48'05.26632"	1202.15'	1269.87'	0.04'	13°39'	0.04'	0.04'
NET 2	8636667.148	711577.688	45°36'21.24458"	118°48'06.61354"	1183.31'	1251.03'	0.04'	16°21'	0.04'	0.05'
NET 3	8636646.590	714099.098	45°36'46.24399"	118°48'06.15704"	1091.94'	1159.74'	0.04'	18°10'	0.04'	0.05'
NET 4	8636479.713	714075.872	45°36'46.04933"	118°48'08.51107"	1091.90'	1159.71'	0.04'	14°56'	0.04'	0.05'

*FIXED POINTS NOT SUBJECT TO LEAST SQUARES ADJUSTMENT OR CONFIDENCE LEVEL ANALYSIS:



CONTINUOUSLY OPERATING REFERENCE STATION REDMOND PID* AH2507



ANDERSON-PERRY & ASSOCIATES
1901 N. FIR ST., LA GRANDE, OR., 97850
HORIZONTAL CONTROL, RECOVERY AND RETRACEMENT MAP
PENDLETON-JOHN DAY HIGHWAY
HIGHWAY 28, (OR 37), (US395)
BRIDGE 08050, GRANT COUNTY

FOR OBDP & ODOT REGION 5
3014 ISLAND AVE.,
LA GRANDE, OR., 97850
AUGUST, 2007
SCALE: 1"=2000'
SHEET 1 OF 3

07-240-B
Umatilla County Surveyor
Date 8-07
Revised by KK
07-240-B

SEC. 34, T. 02 N., R. 32 E., W.M.

Anderson Perry & Associates, Inc.
 engineering - surveying - materials testing

Pleasant Valley



27 34
 (210)



McKAY DRIVE

ELDER AVENUE

N88°50'53"E 2635.81'

T=1341.45' L=2655.82'
 Δ19°55'07" R=7639.44' DOC=0°45'00"

P.C. 169+75.30

350' SPIRAL
 K=187.50

P.L. 174+81.96

S03°03'41"E

PENDLETON - JOHN DAY HIGHWAY

N48°50'33"W 1813.55'

P.T. 173+50.30
 N=714324.909
 E=8637712.112

A.P.A. 174+81.96
 B.K. 174+93.25

27 34
 28 33
 (650)

S00°58'03"E 5285.89'

34 | 3
 33 | 4
 (201)

LEGEND	
○	FOUND MONUMENT NOTED IN TABLE
▲	NETWORK POINT
---	EDGE OF PAVEMENT
---	RIGHT-OF-WAY
---	PROPERTY LINE
-X-	FENCE

RECOVERED MONUMENT LIST

PT. NO.	LDP NORTHING	LDP EASTING	STATION	OFFSET	DATE	DESCRIPTION & REFERENCE DOCUMENTS
201	710233.325	8636435.943			NOV. 2006	FD. 2 1/2" BRASS CAP, PROPERLY MARKED, 0.2' ABOVE GRADE, 1' N.E. OF ROW FENCE 94-109-C
202	714319.530	8637612.326	173+50.39	99.93' RT.	NOV. 2006	FD. 1/2" SMOOTH IRON ROD IN ROW FENCE, 0.2' ABOVE GRADE, NO WITNESS POST 7B-35-11
203	714302.616	8637813.595	173+77.98	100.15' LT.	NOV. 2006	FD. 5/8" REBAR 0.1' ABOVE GRND, 1.0' SOUTH OF ROW FENCE, PLAT OF PLEASANT VALLEY
204	714332.532	8637811.889	173+48.02	100.04' LT.	NOV. 2006	FD. 5/8" REBAR 0.1' ABOVE GRND, IN ROW FENCE, PLAT OF PLEASANT VALLEY
205	714330.160	8637811.972	173+50.39	100.00' LT.	NOV. 2006	FD. 1/2" SMOOTH IRON ROD IN ROW FENCE, 0.1' ABOVE GRADE, NO WITNESS POST 7B-35-11
206	714362.510	8637810.281	173+18.01	100.04' LT.	NOV. 2006	FD. 5/8" REBAR 0.1' ABOVE GRND, IN ROW FENCE, PLAT OF PLEASANT VALLEY
207	714706.977	8637788.720	169+75.30	100.00' LT.	NOV. 2006	FD. 1/2" SMOOTH IRON ROD IN ROW FENCE, 0.1' ABOVE GRADE, NO WITNESS POST 7B-35-11
208	714691.432	8637589.378	169+75.27	99.95' RT.	NOV. 2006	FD. 1/2" SMOOTH IRON ROD IN ROW FENCE, 0.1' ABOVE GRADE, NO WITNESS POST 7B-35-11
210	715571.447	8638981.964			NOV. 2006	FD. 2 1/2" BRASS CAP, PROPERLY MARKED, 0.8' BELOW GRADE, 7.3' SW OF PPL PP*344900, 94-109-C
221	713458.538	8637858.702	182+11.97	100.11' LT.	NOV. 2006	FD. 1/2" REBAR, 0.1' BELOW GRADE, 0.4' SW OF FENCE CORNER, PLAT OF PLEASANT VALLEY
511	713755.223	8637756.804	179+10.27	14.20' LT.	NOV. 2006	PK NAIL IN ASPHALT, AERIAL PRE-MARK
512	713754.155	8637727.404	179+09.77	15.21' RT.	NOV. 2006	PK NAIL IN ASPHALT, AERIAL PRE-MARK
514	713346.067	8637694.152	183+15.47	70.20' RT.	NOV. 2006	1/2" IRON ROD WITH RED PLASTIC CAP MARKED "APA CONTROL", AERIAL PRE-MARK
650	715518.463	8636346.690			NOV. 2006	FD. 2 1/2" BRASS CAP, PROPERLY MARKED, 3.0' BELOW GRADE, 94-109-C

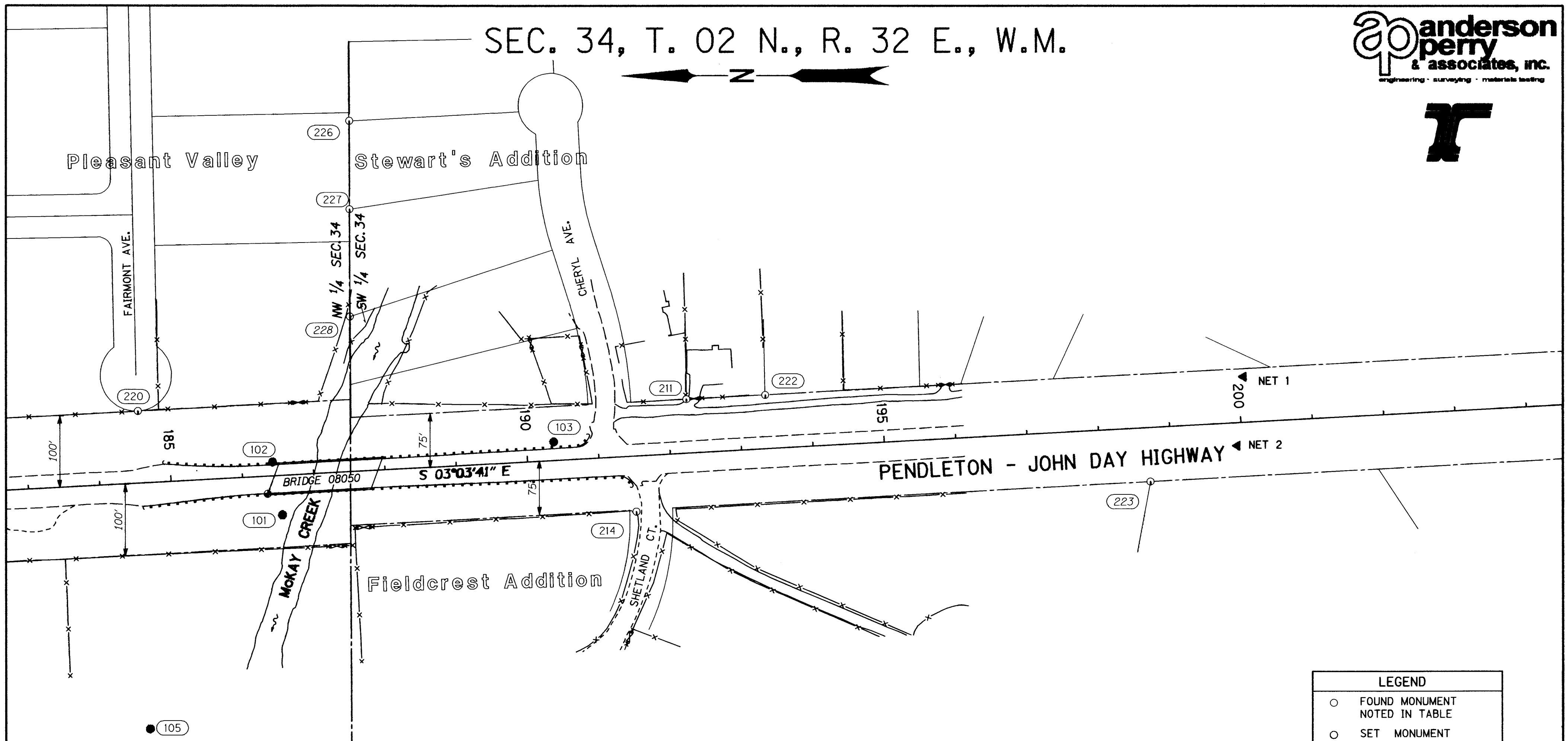
REGISTERED PROFESSIONAL LAND SURVEYOR
A.M. [Signature]
 OREGON
 JAN. 21, 1992
 HARMON E. MCLENDON
 2537
 Renewed 12/31/08

ANDERSON-PERRY & ASSOCIATES
 1901 N. FIR ST., LA GRANDE, OR., 97850
 HORIZONTAL CONTROL, RECOVERY AND RETRACEMENT MAP
 PENDLETON-JOHN DAY HIGHWAY
 HIGHWAY 28, (OR 37), (US395)
 BRIDGE 08050, GRANT COUNTY
 FOR OBDP & ODOT REGION 5 3014 ISLAND AVE., LA GRANDE, OR., 97850
 AUGUST, 2007
 SCALE: 1"=100'
 SHEET 2 OF 3

RECEIVED BY
 07-240-B Umatilla County Surveyor
 Date 8-07
 Rec'd By [Signature]
 No. 07-240-B



SEC. 34, T. 02 N., R. 32 E., W.M.



SET MONUMENT LIST

PT. NO.	LDP NORTHING	LDP EASTING	STATION	OFFSET	DESCRIPTION & REFERENCE DOCUMENTS
101	713009.493	8637727.459	186+53.37	54.92' RT.	1/2" IRON ROD, 24" LONG WITH RED PLASTIC CAP MARKED "APA CONTROL"
102	713023.555	8637800.758	186+43.24	19.02' LT.	1/2" IRON ROD, 24" LONG WITH RED PLASTIC CAP MARKED "APA CONTROL"
103	712629.901	8637828.419	190+37.81	25.62' LT.	1/2" IRON ROD, 24" LONG WITH RED PLASTIC CAP MARKED "APA CONTROL"
105	713194.806	8637429.458	184+52.41	342.60' RT.	1/2" IRON ROD, 24" LONG WITH RED PLASTIC CAP MARKED "APA CONTROL"

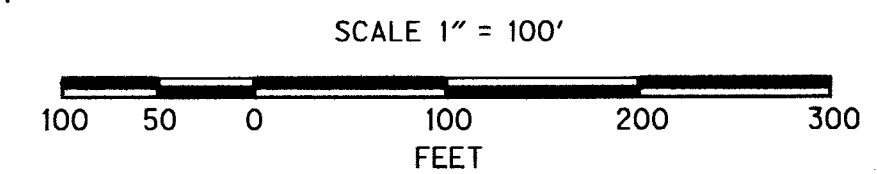
RECOVERED MONUMENT LIST

PT. NO.	LDP NORTHING	LDP EASTING	STATION	OFFSET	DATE	DESCRIPTION & REFERENCE DOCUMENTS
211	712444.256	8637887.796	192+26.36	75.00' LT.	NOV. 2006	FD. 1/2" REBAR, 0.1'± BELOW GRADE, 0.4'± SW OF FENCE CORNER PLAT OF STEWART'S ADDITION
220	713212.098	8637871.747	184+58.76	99.98' LT.	NOV. 2006	FD. 1/2" REBAR IN FENCE, 0.3'± ABOVE GRADE, 250'± NORTH OF MCKAY CREEK, PLAT OF PLEASANT VALLEY
222	712333.748	8637893.380	193+37.01	74.67' LT.	NOV. 2006	FD. 1/2" REBAR, BENT, TIED AT SPIN HOLE, 0.4'± WEST OF CHAIN LINK FENCE, PLAT OF STEWART'S ADDITION
214	712514.012	8637731.413	191+48.35	77.43' RT.	NOV. 2006	FD. 5/8" IRON ROD WITH NO CAP, 0.1'± ABOVE GROUND, PLAT OF FIELDCREST ADDITION
226	712916.215	8638276.021	187+75.81	487.87' LT.	NOV. 2006	FD. 1/2" REBAR, FLUSH WITH GROUND, 0.8' SOUTH OF E-W FENCE, PLAT OF STEWART'S ADDITION
227	712915.588	8638152.826	187+69.86	364.82' LT.	NOV. 2006	FD. 1/2" REBAR, 0.1'± BELOW GRADE, 1.0'± WEST OF POWER POLE #343541, PLAT OF STEWART'S ADDITION
228	712914.592	8638003.694	187+62.89	215.85' LT.	NOV. 2006	FD. 1/2" REBAR, FLUSH WITH GROUND, BENT, TIED AT SPIN HOLE, PLAT OF STEWART'S ADDITION
223	711794.447	8637772.444	198+69.08	74.89' RT.	NOV. 2006	FD. 5/8" IRON ROD, 0.1'± ABOVE GRADE, 2.2' EAST OF FENCE CORNER, PLAT OF FIELDCREST ADDITION
523	713030.444	8637756.489	186+34.00	24.81' RT.	NOV. 2006	FD. 3" BRASS CAP SET FLUSH IN NW CORNER OF BRIDGE CURB, NO MARKINGS, RECORD UNKNOWN

LEGEND	
○	FOUND MONUMENT NOTED IN TABLE
○	SET MONUMENT NOTED IN TABLE
▲	NETWORK POINT
---	EDGE OF PAVEMENT
---	RIGHT-OF-WAY
---	PROPERTY LINE
-X-	FENCE

REGISTERED PROFESSIONAL LAND SURVEYOR

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