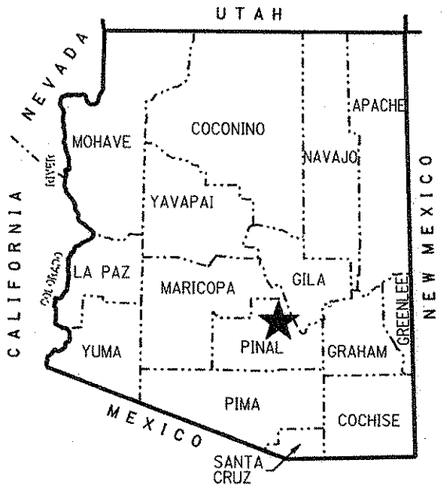

★ PROJECT LOCATION

COUNTY NAME: PINAL
LENGTH OF PROJECT: 1.5 MILES
ADOT DISTRICT: GLOBE (G)
DRAWING NUMBER: D-11-T-481

RIGHT OF WAY PLANS OF THE

WINKELMAN-SUPERIOR HIGHWAY
MP 163.7 - APACHE LEAP ROAD
177 PN 163 H6921 01R

Click here for SR 177 Index

SHEET INDEX

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PLAN SHEET	P-1 TO P-2
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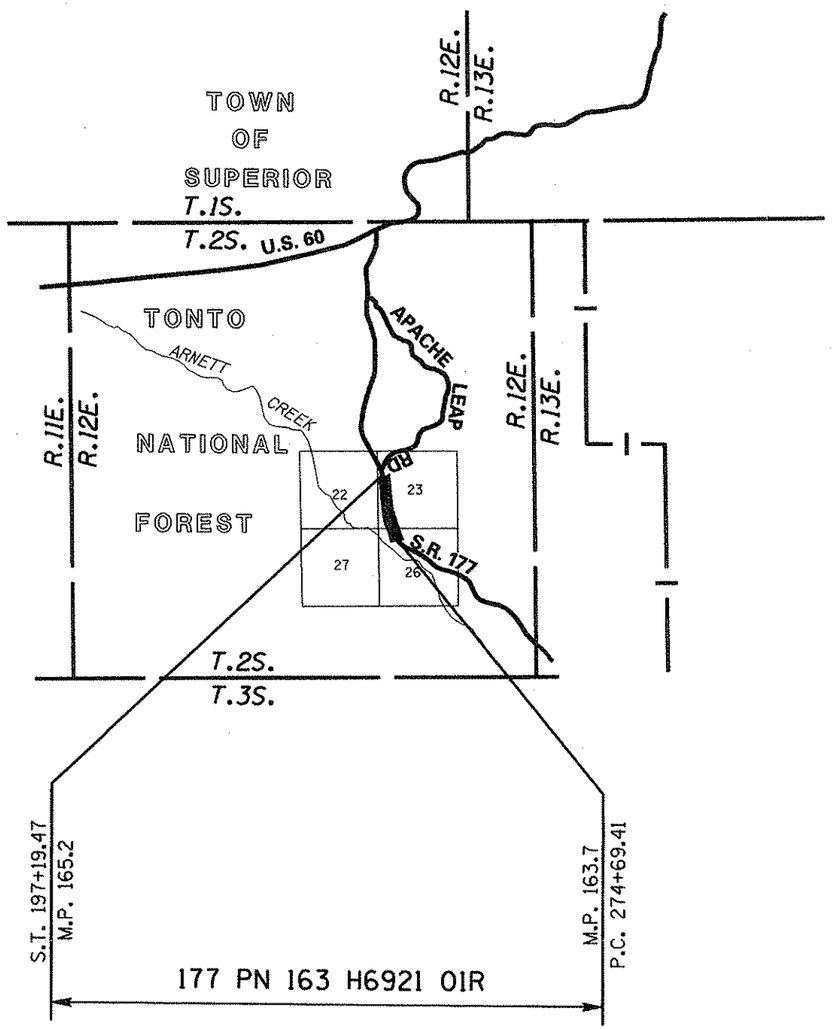
RIGHT OF WAY MONUMENTATION SURVEY	MS-1 TO MS-2
TOTAL SHEETS	11

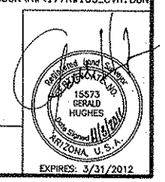


ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION

ADOT

APPROVED IN ACCORDANCE WITH
ARIZONA DEPARTMENT OF TRANSPORTATION BOARD
RESOLUTION 2008-11-A-056 DATED 11-14-08
RESOLUTION 2009-06-A-032 DATED 6-19-09

...\DGN\RW\177RW163_CVR.DGN



eps group, inc.
Engineers, Planners & Surveyors

RIGHT OF WAY - STANDARD ABBREVIATIONS & SYMBOLS

A	
Acres	Ac.
Ahead	Ahd.
And Husband	et vir
And Others	et al
And Wife	et ux
Approximate	Approx.
Avenue	Ave.
B	
Back	Bk.
Book	Bk.
Boulevard	Blvd.
Brass Cap	B.C.
Bureau of Indian Affairs	B.I.A.
Bureau of Land Management	B.L.M.
Bureau of Reclamation	B.O.R.
C	
Calculated	(C)
Center	Ctr.
Centerline	℄
Construction	Constr.
Corner	Cor.
County	Co.
Curve Information	
Curve to Spiral	C.S.
Degree of Curve	D
Delta	Δ
Length of Curve	L
Point of Compound Curve	P.C.C.
Point of Curvature	P.C.
Point of Intersection	P.I.
Point of Reverse Curve	P.R.C.
Point of Reverse Spiral	P.R.S.
Point of Tangent	P.T.
Point on Curve	P.O.C.
Point on Tangent	P.O.T.
Point on Semi-Tangent	P.O.S.T.
Radius	R
Spiral rate of change	a
Spiral to Curve	S.C.
Spiral to Tangent	S.T.
Tangent Length	T
Tangent to Spiral	T.S.

D	
Degrees	°
Department	Dept.
Docket	Dkt.
Drainage Easement	DE
Drive	Dr.
E	
Easement	Esmt
East	E.
Electrical	Elec.
Equation	Equa.
Existing	Exist.
F	
Federal	Fed.
Feet	'
Flowage Easement	FE
Final Order of Condemnation	FOC
Found	Fd.
H	
Highway	Hwy.
Highway Easment Deed	HED
Homestead Entry Survey	HES
I	
Inch	In. or "
Irrigation	Irr.
J	
Junction	Jct.
L	
Lane	Ln.
Left	Lt.
Local Tangent Bearing	L.T.B.
M	
Measured	(M)
Mile Post	M.P.
Mineral Survey	M.S.
Minutes	'
Miscellaneous	Misc.
Monument	Mon.
N	
North	N.
Not to Scale	N.T.S.
Number	No.
P	
Page	Pg.
Parcel	Par.
Parkway	Pkwy.
Place	Pl.
Ponding Easement	PE
Public Utility Easement	PUE
Q	
Quit Claim Deed	QCD
R	
Railroad	R.R.
Range	R.
Record	(R)
Right	Rt.
Right of Way	R/W
Road	Rd.
S	
Seconds	"
Section	Sec.
Sheet	Sht.
Slope Easement	SE
South	S.
Special Warranty Deed	SWD
Square	Sq.
Square Feet	S.F.
State Route	S.R.
Station	Sta.
Street	St.
Subdivision	Subd.
T	
Telegraph	Tlg.
Telephone	Tel.
Township	T.
Temporary	Temp.
Temporary Construction Easement	TCE
Traffic Interchange	T.I.
U	
United States General Land Office	U.S.G.L.O.
W	
West	W.
Warranty Deed	WD

Boundary Lines
- City Limit Line
- County Line
- Forest-City Limit Line
- Forest-Reservation Line
- Land Grant Boundary Line
- National-State Boundary Line

Centerlines
- Exist. Centerline w/ticks
- Exist. Centerline wo/ticks
- New Constr. Centerline
- New Survey Centerline
- Railroad Centerline
- Centerline on Results of Survey

Control Lines
- Exist. Access Control Line
- New Access Control Line

Easement Lines
- Exist. Easement Line
- Exist. Drainage Easement Line
- New Perpetual Easement Line
- TCE Line

Misc. Lines
- Ditch-River Line
- Meander Line
- Mining Claim Line

Property Lines
- Lease Property Line
- Property Line
- Subdivision Property/Road Line
- Additional area to be acquired

Public Land Survey Lines
- Mid Section Line
- Section Line
- Sixteenth (1/16) Line
- Township-Range Line

R/W Lines
- Exist. ADOT R/W Line
- Exist. Non-ADOT R/W Line
- New R/W Line
- Railroad R/W Line
- Railroad-Highway R/W Line

Topographic Features
- Cut Slope Limit Line
- Exist. Fence Line
- Exist. Topo Line
- Fill Slope Limit Line
- New Fence Line

Break Line

Data Circle (1)

Data Hex (1)

Data Square [1]

Dimension Arrow

Dimension Tie

Exist. ADOT R/W Monument

New R/W Monument or R/W control point

Centerline Control or Supplemental Monument

Property Anchor Bar

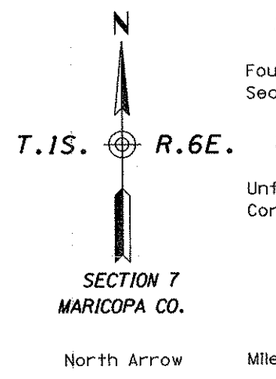
Property-Lease & Unpatented Mining Claim Anchor Bar

Property Limit Arrow

Property-Lease & Unpatented Mining Claim Limit Arrow

Parcel Bubble (7-8858)

Survey Control Pt or Angle Point



North Arrow

31 | 32 / 6 | 5 Found or Set Section Corner

4 o 3 Found or Set Quarter Corner

3 Found or Set Center Quarter Corner

31 | 32 + 6 | 5 Unfound Section Corner

4 + 9 Unfound Quarter Corner

3 Unfound Center Quarter Corner

MP 1 1 5 Mile Post Marker

Click here for SR 177 Index

...\DGN\RW\177RW163_STD.DGN

DRAWING NO.	D-11-T-481	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION RIGHT OF WAY PLANS SECTION	
SURVEY	SEE ATTACHED	HIGHWAY NAME: WINKELMAN - SUPERIOR	
DRAWN/DATE	C. DOYLE/APR 07	FEDERAL AID NO.: UNASSIGNED	
ADOT REVIEW	D. MILLER	PROJECT NO.: 177 PN 163 H6921 01R	
eps group, inc. Engineers, Planners & Surveyors			
ROUTE NO.: S.R. 177	LOCATION: MP 163.7 - APACHE LEAP ROAD		

15573 GERALD HUGHES — REGISTERED — ARIZONA, U.S.A. — EXPIRES: 3/31/2012

SHEET S-1

OWNERSHIP RECORD

NOTES	PARCEL NUMBER	OWNER	DESCRIPTION OF AREA REQUIRED	TOTAL AREA	AREA REQUIRED: GROSS (INCLUDING EXISTING R/W)	AREA REQUIRED: NET (EXCLUDING EXISTING R/W)	AREA REQUIRED: NEW EASEMENTS	REMAINDER: LEFT	REMAINDER: RIGHT	SHEET NO.	ACQUIRED: TYPE	ACQUIRED: DOCUMENT
	11-0679	U.S.A. (Tonto National Forest)	W2 SW4 Sec. 23, T.2S. R.12E.			536,013				P-1 & P-2		
			NW4 NW4 Sec. 26, T.2S. R.12E.			11,915				P-2		

ALL AREAS ARE IN SQUARE FEET UNLESS OTHERWISE NOTED

...\DGN\RW\177RW163_ORS01.DGN

CHANGE ORDER REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION OF REVISIONS

DRAWING NO.	D-11-T-481
SURVEY	SEE ATTACHED
DRAWN/DATE	C. DOYLE/APR 07
ADOT REVIEW	D. MILLER

eps group, Inc. Engineers, Planners & Surveyors

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
RIGHT OF WAY PLANS SECTION

HIGHWAY NAME: WINKELMAN - SUPERIOR

FEDERAL AID NO.: UNASSIGNED

PROJECT NO.: 177 PN 163 H6921 01R

ROUTE NO.: S.R. 177

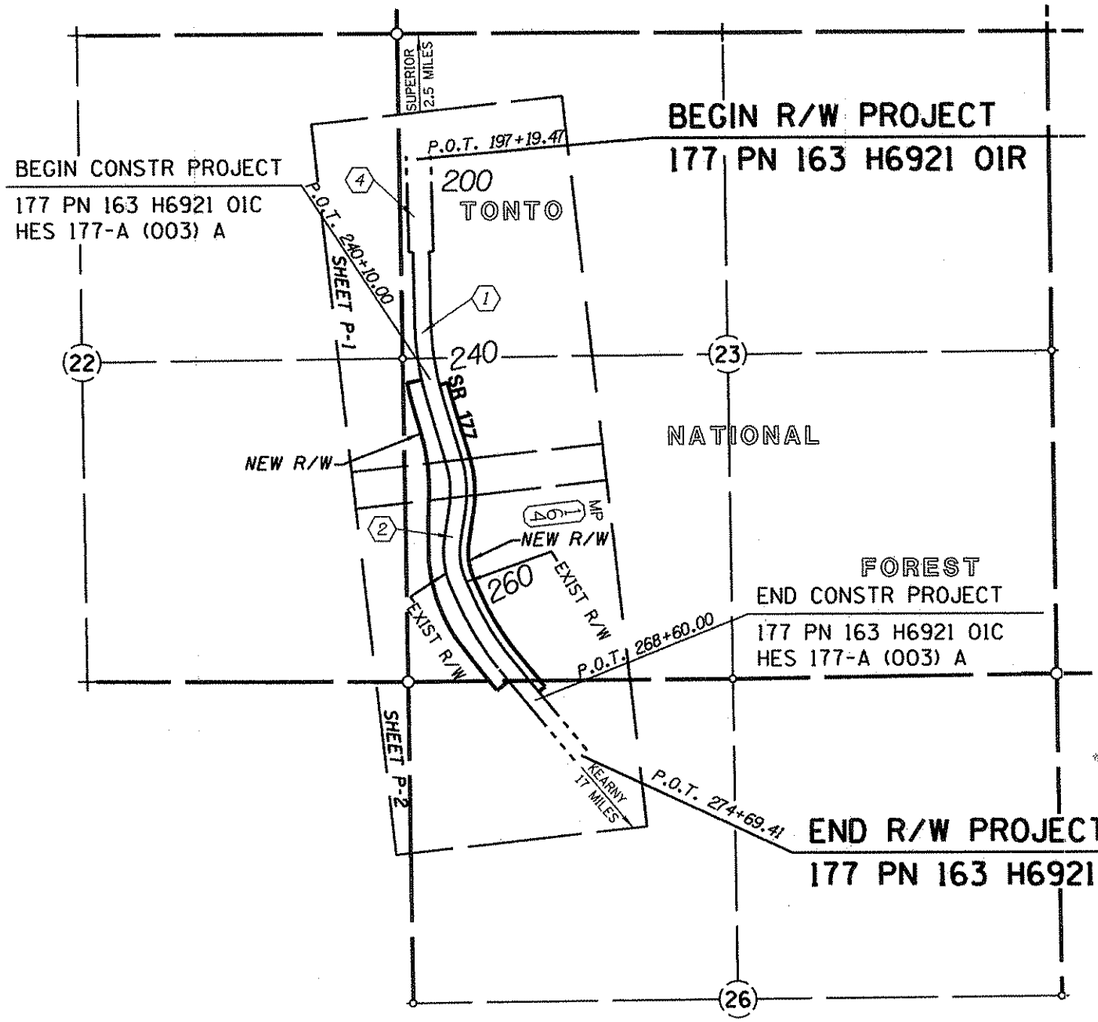
LOCATION: MP 163.7 - APACHE LEAP ROAD

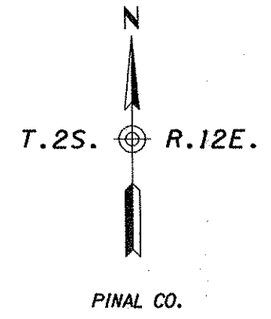
Registered Land Surveyor
Registered Date No. 15573
GERALD HUGHES
Date Signed 2/27/2011
ARIZONA, U.S.A.
EXPIRES: 3/31/2012

SHEET ORS-1

Click here for SR 177 Index

Click here for SR 177 Index





VICINITY MAP

0 300 600
Scale

...\DGN\RW\177RW163_VM01.DGN

INDEX TO EXISTING ADOT R/W

(#) ID.	LOCATION	SEC.	T.	R.	ACQ. FROM	TYPE	BK./DKT.	PAGE	WIDTH	YEAR	PARCEL NO.
1		--	2S	12E	U.S. FOREST SERVICE	S.U.P.	---	---	132'	1953	----
2		--	2S	12E	U.S. FOREST SERVICE	A.S.U.P.	---	---	134'	1972	----
4		--	2S	12E	U.S. FOREST SERVICE	ESMT	1737	376	VARIES	1991	11-105

(#)- Refers to Item number in Existing R/W report dated 7/16/07

CHANGE ORDER REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION OF REVISIONS

DRAWING NO.	D-11-T-481
SURVEY	SEE ATTACHED
DRAWN/DATE	C. DOYLE/APR 07
ADOT REVIEW	D. MILLER
eps group, Inc. Engineers, Planners & Surveyors	
ROUTE NO.:	S.R. 177
LOCATION:	MP 163.7 - APACHE LEAP ROAD

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
RIGHT OF WAY PLANS SECTION

HIGHWAY NAME: WINKELMAN - SUPERIOR
FEDERAL AID NO.: UNASSIGNED
PROJECT NO.: 177 PN 163 H6921 01R

Registered Land Surveyor — Certificate No. 15573 — GERALD HUGHES — Date Signed — ARIZONA U.S.A.
EXPIRES: 3/31/2012

SHEET VM-1

Click here for SR 177 Index

BEGIN R/W PROJECT
177 PN 163 H6921 01R
TONTO

T.2S. R.12E.
PINAL CO.

11-0679
NATIONAL

1/4 Cor. Fd. G.L.O. Stone 8"x20"x18" w/ 1/4 etched on west face

C 1/4 Cor. Not Found

Constr ℄
Exist R/W ℄
DETAIL "C"

P.O.T. 243+96.52 EXIST. R/W ℄
P.O.C. 243+92.88 CONST. ℄

⑤ EXIST R/W ℄ CURVE DATA
PI 249+02.21
Δ=25°16'00" RT
D=06°18'00"
T=203.84'
L=401.06'
R=909.46'

BEGIN CONSTR PROJECT
177 PN 163 H6921 01C
HES 177-A(003)A

① EXIST R/W ℄ CURVE DATA
PI 232+27.83
Δ=00°26'00" RT
D=00°15'00"
T=86.67'
L=173.33'
R=22918.31'

② CONSTR. ℄ CURVE DATA
PI 238+53.26
Δ=15°41'00" LT
D=02°10'58"
T=361.53'
L=718.53'
R=2625.00'

③ EXIST R/W ℄ CURVE DATA
PI 238+56.19
Δ=15°41'00" LT
D=02°18'00"
T=343.09'
L=681.88'
R=2491.12'

④ CONSTR. ℄ CURVE DATA
PI 246+90.40
Δ=18°26'12" RT
D=02°59'59"
T=309.98'
L=614.60'
R=1910.00'

NW¼NW¼ · SW¼NW¼ · NW¼SW¼

200 · 205 · 230 · 235 · 240 · 245

EXIST R/W · NEW R/W · SR 177 · Mid Sec Line · Section Line · Constr ℄ · Exist R/W ℄

P.O.T. 197+19.47 EXIST. R/W ℄
Approx 1/16 Line
S01°09'48"E 2641.83
100' · 100'

P.O.T. 205+00.00 BK. EXIST. R/W ℄
P.O.T. 229+70.99 AHD. EXIST. R/W ℄ EQUA
P.C. 231+41.16 EXIST. R/W ℄
P.T. 233+14.50 EXIST. R/W ℄
P.C. 234+91.73 CONSTR. ℄ L.T.B. S00°43'55"E
P.C. 235+13.11 EXIST. R/W ℄
S00°43'48"E · 66' · 66'

S00°34'43"E 2641.83

Sec. Cor. Fd. G.L.O. Stone 10"x8"x4" w/ 2 notches on east face and 3 notches on South face.

1/4 Cor. Fd. G.L.O. Stone 18"x12"x8" w/ 1/4 etched on west face

Sec. Cor. Fd. G.L.O. Stone 8"x10"x4" w/ Cross etched on top

2639.88'

23°24 · 5271.05' · N89°32'33"E · 133.00' LT P.O.C. 240+77.00 EXIST. R/W ℄ L.T.B. S13°41'59"E · 66.00' LT P.O.C. 240+77.00 EXIST. R/W ℄ · P.O.C. 240+10.00 CONSTR. ℄ · 67.10 RT P.O.C. 240+00.00 CONSTR. ℄ · 190.00' RT P.O.C. 240+00.00 CONSTR. ℄ L.T.B. S11°49'33"E · S00°32'07"E

P.T. 241+94.99 EXIST. R/W ℄ · S16°24'48"E 503.38' · P.C. 246+98.37 EXIST. R/W ℄ · L=459.71' R=1042.46'

Exist R/W ℄ S16°24'48"E · Constr ℄ S16°24'55"E CONSTR. · SEE DETAIL "C" · SEE DETAIL "A" · SEE DETAIL "B"

P.T. 242+10.26 CONSTR. ℄ · P.C. 243+80.42 CONSTR. ℄

R=1720.00' L=553.46'

133.00' · 190.00' · 190.25' · 66' · 190'

FOREST

EAST WEEPING FOREST · CLIFFS TRAIL · ROAD 230

30' Ingress & Egress Easement, Surveys Book 23, Page 26

SHEET P-2 · MATCH LINE

DATA TABLE		
A	N76°18'01"E	67.00'
B	L=111.69'	R=2358.12'
C	S78°10'27"W	122.90'
D	L=225.48'	R=2815.00'
E	S16°24'55"E	170.16'

BEGIN CONSTR. ℄ P.C. 234+91.73 L.T.B. S00°43'55"E
0.14'
Constr ℄
Exist R/W ℄
P.O.T. 234+95.11
DETAIL "A"

P.O.C. 238+36.24 CONSTR. ℄ L.T.B. S08°15'06"E MID SEC LINE TIE
P.O.C. 238+39.56 EXIST. R/W ℄ L.T.B. S08°14'19"E MID SEC LINE TIE
Constr ℄
1.36'
Exist R/W ℄
DETAIL "B"

0 50 100 Scale

...\DGN\RW\177RW163_P01.DGN

CHANGE ORDER REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION OF REVISIONS

DRAWING NO.	D-11-T-481
SURVEY	SEE ATTACHED
DRAWN/DATE	C. DOYLE/APR 07
ADOT REVIEW	D. MILLER
eps group, Inc. Engineers, Planners & Surveyors	
ROUTE NO.:	S.R. 177
LOCATION:	MP 163.7 - APACHE LEAP ROAD

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
RIGHT OF WAY PLANS SECTION

HIGHWAY NAME: WINKELMAN - SUPERIOR
FEDERAL AID NO.: UNASSIGNED
PROJECT NO.: 177 PN 163 H6921 01R

Registered Land Surveyor · 15573 · GERALD HUGHES · Date Signed 12/12/07 · ARIZONA, U.S.A. · EXPIRES: 3/31/2012

SHEET P-1

END R/W PROJECT
177 PN 163 H6921 01R

DETAIL "A"
Exist R/W ℄
Constr ℄
P.O.C. 254+67.71
EXIST. R/W ℄
P.O.S. 254+51.35
CONSTR. ℄

DETAIL "B"
Constr ℄
Exist R/W ℄
P.O.C. 255+81.31
EXIST. R/W ℄
P.O.C. 255+64.86
CONSTR. ℄

DETAIL "C"
Constr ℄
Exist R/W ℄
P.O.C. 263+77.79
EXIST. R/W ℄
P.O.T. 263+68.59
CONSTR. ℄

(5) EXIST R/W ℄ CURVE DATA
PI 249+02.21
Δ=25°16'00" RT
D=06°18'00"
T=203.84'
L=401.06'
R=909.46'

(6) EXIST R/W ℄ CURVE DATA
PI 255+54.81
Δ=32°44'00" LT
D=08°36'00"
T=195.66'
L=380.62'
R=666.23'

(7) CONSTR. ℄ CURVE DATA
PI 258+01.16
TOTAL CURVE
Δ=40°47'14"
T=584.27'
L=1128.67'
SPIRAL
a=2.58
Δ=6°30'24"
L=273.00'
MAIN CURVE
Δ=27°46'26" LT
D=04°46'00"
L=582.67'
R=1202.00'
SPIRAL
a=2.58
Δ=6°30'24"
L=273.00'

(8) EXIST R/W ℄ CURVE DATA
PI 261+91.25
Δ=15°03'00" LT
D=02°30'00"
T=302.74'
L=602.00'
R=2291.83'

(4) CONSTR. ℄ CURVE DATA
PI 246+90.40
Δ=18°26'12" RT
D=02°59'59"
T=309.98'
L=614.60'
R=1910.00'

TONTO
NATIONAL
FOREST
SR 177
NEW R/W
EXIST R/W
Approx 1/16 Line
MATCH LINE
SHEET P-1
11-0679
T.2S. R.12E.
PINAL CO.

1/4 Cor. Fd. G.L.O. Stone 20"x12"x5" w/1/4 etched on north face
1/4 Cor. Fd. G.L.O. Stone 18"x12"x8" w/1/4 etched on west face
Sec. Cor. Fd. G.L.O. Stone 8"x10"x4" w/ Cross etched on top

L=459.71' R=1042.46'
P.T. 250+99.43 EXIST. R/W ℄
P.C. 253+59.15 EXIST. R/W ℄
P.T. 257+39.77 EXIST. R/W ℄
P.C. 258+88.51 EXIST. R/W ℄
P.T. 264+90.51 EXIST. R/W ℄
P.T. 249+95.01 CONSTR. ℄
T.S. 252+16.89 CONSTR. ℄
S.C. 254+89.89 CONSTR. ℄ L.T.B. S04°29'07"E
C.S. 260+72.56 CONSTR. ℄ L.T.B. S32°15'33"E
S.T. 263+45.56 CONSTR. ℄
P.O.T. 265+03.66 CONSTR. ℄
133.00' LT P.O.T. 267+69.40 EXIST. R/W ℄
133.00' LT P.O.T. 268+32.00 EXIST. R/W ℄
66.00' LT P.O.T. 268+32.00 EXIST. R/W ℄
190.00' RT P.O.T. 266+00.81 CONSTR. ℄
P.O.T. 274+69.41
℄ R/W of undefined width for electric transmission B.L.M. r/w # 086149
P.O.T. 266+55.10 CONSTR. ℄ SEC. LINE TIE
P.O.T. 266+62.78 EXIST. R/W ℄ SEC LINE TIE
P.O.T. 266+00.81 CONSTR. ℄
P.O.T. 268+60.00 END CONSTR. ℄
P.O.T. 268+69.24
END CONSTR PROJECT
177 PN 163 H6921 01C
HES 177-A(003)A

S38°55'48"E
S38°45'57"E CONSTR.
S23°52'48"E
S08°51'12"W
S02°01'17"W
S00°13'36"E
N89°47'22"E
Section Line
S00°32'07"E 2639.88'
2638.68'
659.77'
294.40'
221.88'
155.87'
84.59'
85.67'
167.97'
68.11' RT
2.50'
1.36'
+25.81

SEE DETAIL "A"
SEE DETAIL "B"
SEE DETAIL "C"
SEE DETAIL "D"
SEE DETAIL "E"

DETAIL "D"
DETAIL "E"

Note: A 20' right of way for gas pipeline per B.L.M. right of way #02148-A effects Section 23&26, Easement Is not plottable from available information

0 50 100 Scale

...\DGN\RW\177RW163_P02.DGN

DATA TABLE

A	S08°51'12"W 259.72'
B	L=304.64' R=533.23'
C	S23°52'48"E 148.74'
D	L=567.06' R=2158.83'
E	S38°55'48"E 278.90'
F	S38°55'48"E 62.60'
G	S51°04'12"W 67.00'
H	S02°01'17"W 221.88'
I	S00°13'36"E 294.40'
J	L=674.77' R=1392.00'
K	S36°31'04"E 294.40'
L	S38°45'57"E 158.11'
M	S38°45'57"E 97.15'
N	N51°14'03"E 121.89'

CHANGE ORDER REVISIONS

C.O. NO.	DATE	BY	DESCRIPTION OF REVISIONS

DRAWING NO.	D-11-T-481
SURVEY	SEE ATTACHED
DRAWN/DATE	C. DOYLE/APR 07
ADOT REVIEW	D. MILLER

eps group, inc. Engineers, Planners & Surveyors

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
RIGHT OF WAY PLANS SECTION

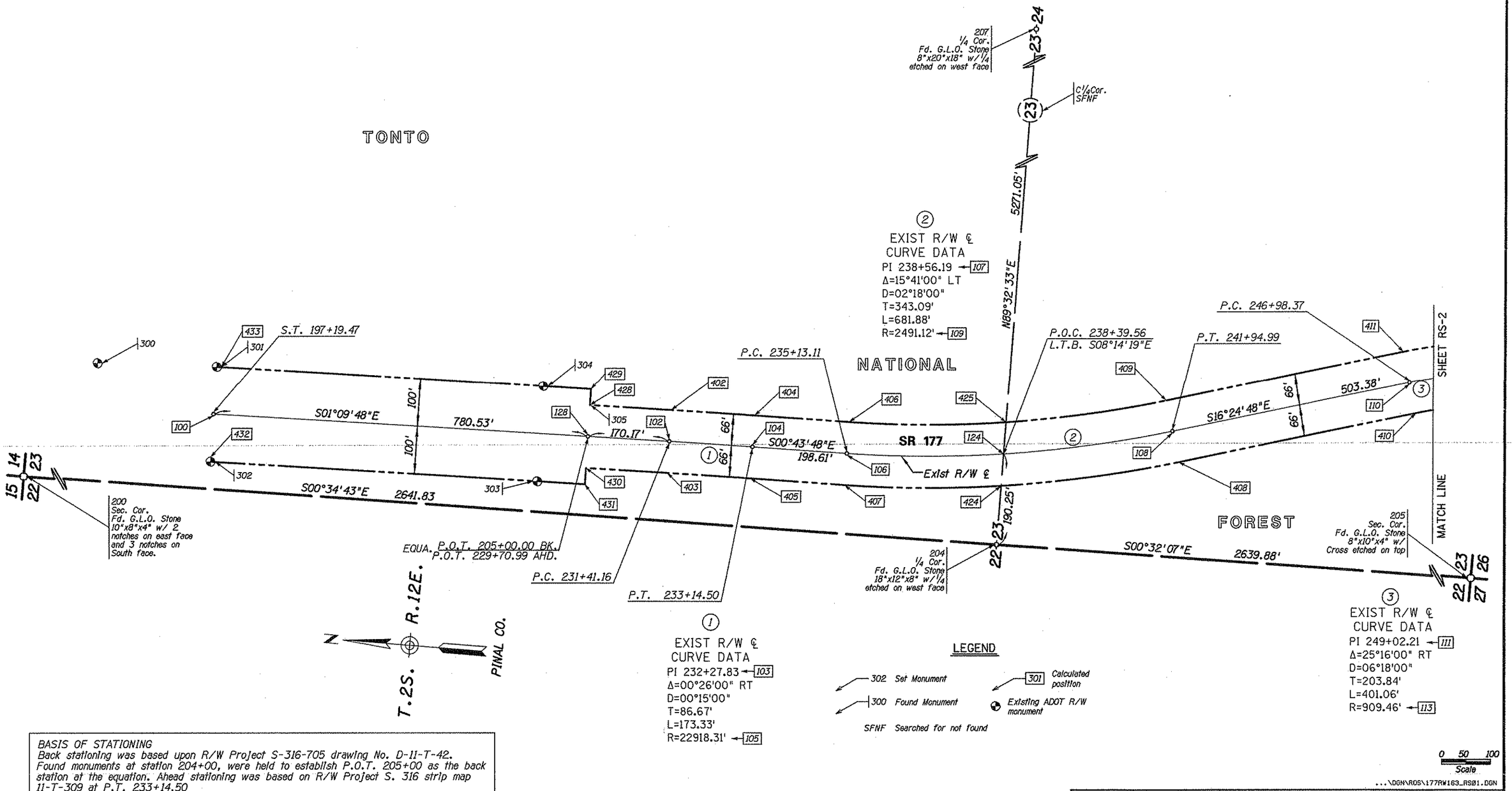
HIGHWAY NAME: WINKELMAN - SUPERIOR
FEDERAL AID NO.: UNASSIGNED
PROJECT NO.: 177 PN 163 H6921 01R
ROUTE NO.: S.R. 177
LOCATION: MP 163.7 - APACHE LEAP ROAD

Registered Land Surveyor 15573 GERALD HUGHES Arizona U.S.A. EXPIRES: 3/31/2012

SHEET P-2

Click here for SR 177 Index

RESULTS OF SURVEY



BASIS OF STATIONING
Back stationing was based upon R/W Project S-316-705 drawing No. D-11-T-42. Found monuments at station 204+00, were held to establish P.O.T. 205+00 as the back station at the equation. Ahead stationing was based on R/W Project S. 316 strip map 11-T-309 at P.T. 233+14.50

Note: The alignment of the northerly most tangent from S.T. 197+19.47 to P.C. 231+41.16 was established by best fit between found ADOT R/W monuments. No R/W monuments were found south of P.O.T. 204+00. The remainder of the alignment was established from record data in R/W Project S. 316 strip map 11-T-309. The tangent distance from the station equation to P.C. 231+41.16 was shortened by 3.71' from the record in order to allow a better fit with the edge of pavement as located in ADOT P & M Project No. 3771.

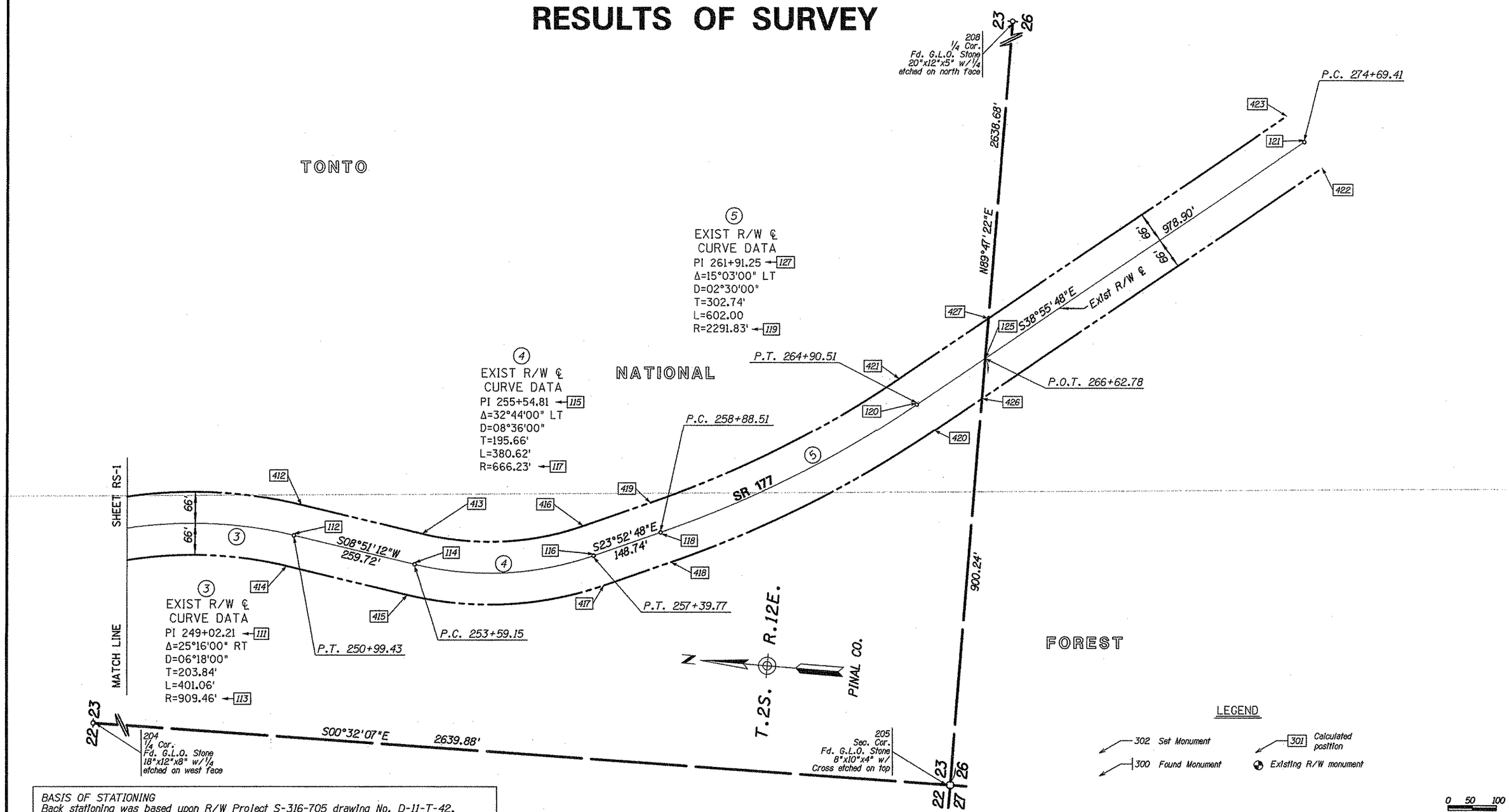
Click here for SR 177 Index

...\DGN\RDS\177RW163_RS01.DGN

DRAWING NO.	D-11-T-481	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION RIGHT OF WAY PLANS SECTION
SURVEY	APR 07	HIGHWAY NAME: WINKELMAN - SUPERIOR
DRAWN/DATE	C. DOYLE/APR 07	FEDERAL AID NO.: UNASSIGNED
ADOT REVIEW	J. TUZYK	PROJECT NO.: 177 PN 163 H6921 01R
eps group, Inc. Engineers, Planners & Surveyors		
ROUTE NO.: S.R. 177	LOCATION: MP 163.7 - OLD HWY 177	SHEET RS-1

Registered Land Surveyor CERTIFICATE NO. 15573 GERALD HUGHES Date Signed 11/23/2007 ARIZONA, U.S.A.

RESULTS OF SURVEY



BASIS OF STATIONING
Back stationing was based upon R/W Project S-316-705 drawing No. D-11-T-42. Found monuments at station 204+00, were held to establish P.O.T. 205+00 as the back station at the equation. Ahead stationing was based on R/W Project S. 316 strip map 11-T-309 at P.T. 233+14.50

Note: The alignment of the northerly most tangent from S.T. 197+19.47 to P.C. 231+41.16 was established by best fit between found ADOT R/W monuments. No R/W monuments were found south of P.O.T. 204+00. The remainder of the alignment was established from record data in R/W Project S. 316 strip map 11-T-309. The tangent distance from the station equation to P.C. 231+41.16 was shortened by 3.71' from the record in order to allow a better fit with the edge of pavement as located in ADOT P & M Project No. 3771.

Click here for SR 177 Index

...\DGN\ROS\177RW163_RS02.DGN

DRAWING NO.	D-11-T-481	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION RIGHT OF WAY PLANS SECTION
SURVEY	APR 07	HIGHWAY NAME: WINKELMAN - SUPERIOR
DRAWN/DATE	C. DOYLE/APR 07	FEDERAL AID NO.: UNASSIGNED
ADOT REVIEW	J. TUZYK	PROJECT NO.: 177 PN 163 H6921 01R
eps group, Inc. Engineers, Planners & Surveyors		
ROUTE NO.: S.R. 177	LOCATION: MP 163.7 - OLD HWY 177	SHEET RS-2

Registered Land Surveyor CERTIFICATE NO. 15573 GERALD HUGHES Date Signed 11/23/2007 ARIZONA, U.S.A.

RESULTS OF SURVEY

CALCULATED POINTS

PT.	NORTHING	EASTING
100	818411.87425	951030.19046
102	817461.36688	951049.49258
103	817374.71767	951051.25218
104	817288.05762	951052.35640
105	816996.05651	928135.90486
106	817089.46578	951054.88686
107	816746.40675	951059.25811
108	816417.30131	951156.20248
109	817121.20503	953545.80545
110	815934.43694	951298.43951
111	815738.89981	951356.03875
112	815537.48432	951324.66606
113	815677.45511	950426.04104
114	815280.85873	951284.69378
115	815087.52894	951254.58053
116	814908.61749	951333.78855
117	815178.32247	951942.98578
118	814772.61036	951394.00189
119	815700.39584	953489.64123
120	814260.27613	951706.79368
121	813498.77612	952321.90582
124	816764.24169	951080.39271
125	814126.26391	951815.04391
127	814495.78391	951516.55903
128	817631.50514	951046.03755
402	817462.70688	951115.47898
403	817460.02688	950983.50618
404	817288.89852	951118.35105
405	817287.21672	950986.36176
406	817090.30668	951120.88150
407	817088.62488	950988.89221
408	816398.65201	951092.89210
409	816435.95060	951219.51285
410	815915.78764	951235.12913
411	815953.08623	951361.74988
412	815527.32658	951389.87971
413	815270.70098	951349.90743
414	815547.64207	951259.45241
415	815291.01648	951219.48013
416	814935.33580	951394.13863
417	814881.89919	951273.43847
418	814745.89205	951333.65181
419	814799.32866	951454.35197
420	814218.80366	951655.45136
421	814301.74860	951758.13601
422	813457.30365	952270.56350
423	813540.24859	952373.24815
424	816763.70989	951013.79755
425	816764.77375	951147.02084
426	814125.95299	951730.45277
427	814126.57482	951899.63505
428	817632.84514	951112.02395
429	817633.53544	951146.01694
430	817630.16514	950980.05116
431	817629.47484	950946.05816
432	818409.84395	950930.21107
433	818413.90455	951130.16984

SECTION CORNERS

PT.	NORTHING	EASTING	DESCRIPTION
200	819404.41995	950863.47620	SEE SHEET RS-1
204	816762.72253	950890.15317	SEE SHEET RS-1
205	814122.95511	950914.81230	SEE SHEET RS-2
207	816804.81327	956161.03999	SEE SHEET RS-1
208	814132.65349	953553.47196	SEE SHEET RS-2

EXISTING R/W LINE

THE FOLLOWING LIST OF POINTS REPRESENTS THE EXISTING RIGHT OF WAY LINE AS DETERMINED BY AN ANALYSIS OF MONUMENTATION FOUND DURING THE COURSE OF THIS SURVEY AND THE EXISTING DOCUMENTATION LISTED HEREIN.

LEFT SIDE			RIGHT SIDE		
PT.	STATION	OFFSET	PT.	STATION	OFFSET
433	197+19.47	100.00 LT	432	197+19.47	100.00 RT
429	205+00.00 BK	100.00 LT	431	205+00.00 BK	100.00 RT
EQUA			EQUA		
428	229+70.99 AHD	66.00 LT	430	229+70.99 AHD	66.00 RT
402	231+41.16	66.00 LT	403	231+41.16	66.00 RT
105	Radius Pt.	---	105	Radius Pt.	---
404	233+14.50	66.00 LT	405	233+14.50	66.00 RT
406	235+13.11	66.00 LT	407	235+13.11	66.00 RT
109	Radius Pt.	---	109	Radius Pt.	---
425	238+48.83	66.00 LT	424	238+30.78	66.00 RT
109	Radius Pt.	---	109	Radius Pt.	---
409	241+94.99	66.00 LT	408	241+94.99	66.00 RT
411	246+98.37	66.00 LT	410	246+98.37	66.00 RT
113	Radius Pt.	---	113	Radius Pt.	---
412	250+99.43	66.00 LT	414	250+99.43	66.00 RT
413	253+59.15	66.00 LT	415	253+59.15	66.00 RT
117	Radius Pt.	---	117	Radius Pt.	---
416	257+39.77	66.00 LT	417	257+39.77	66.00 RT
419	258+88.51	66.00 LT	418	258+88.51	66.00 RT
119	Radius Pt.	---	119	Radius Pt.	---
421	264+90.51	66.00 LT	420	264+90.51	66.00 RT
427	267+15.69	66.00 LT	426	266+09.87	66.00 RT
423	274+69.41	66.00 LT	422	274+69.41	66.00 RT

EXISTING R/W MONUMENTATION

PT.	NORTHING	EASTING	DESCRIPTION	STATION	OFFSET
300	818661.86112	951118.08297	AHD BC FLUSH		
301	818413.90571	951130.01977	AHD BC FLUSH	197+19.47	99.85 LT
302	818409.84279	950930.36114	AHD BC FLUSH	197+19.47	99.85 RT
303	817729.45423	950944.02787	AHD BC FLUSH	204+00.00	100.00 RT
304	817733.51483	951143.98664	AHD BC FLUSH	204+00.00	100.00 LT
305	817631.29956	951112.33404	#6 REBAR NO TAG	229+72.55	66.28 LT

PUBLIC INFORMATION USED

PINAL COUNTY RECORDER'S OFFICE - NO APPLICABLE DOCUMENTS FOUND

ADOT RIGHT-OF-WAY PLANS AND AS-BUILTS

PROJECT NO.	DRAWING NO.	ADOT TRACS NO.	DESCRIPTION	DATE
S-316	11-T-309	---	SUPERIOR-RAY HWY.	1953
S-316-705	D-11-T-42	999 SW 000 H2353 01R	WINKLEMAN-SUPERIOR HWY.	1971
NON FAS 316(1954)A	---	---	AS-BUILT PLANS	

G.L.O. & B.L.M. PLATS

PLAT NO.	NAME	DATE
1445	T. 2 S., R. 12 E. G. & S. R. M. Original Township Survey	1911

G.L.O. & B.L.M. FIELD NOTES

BOOK	PAGES	DATE
2228	2, 7, 8, 13	1908

GENERAL NOTES

ONE NGS CONTROL STATION AND THREE CONTROL POINTS FROM ADOT P &M JOB NO. 3771 WERE USED TO ESTABLISH THE CONTROL BASELINE FOR THIS SURVEY AND THEY ARE AS FOLLOWS:

SUPERIOR NAD 83(1992) 33°18' 30.84957 "(N) 111°06'52.58942 "(W)
Grid Coordinates N 840740.68260 E 945034.29037
Ground Coordinates (Pt 3) N 840881.92703 E 945193.05613

ADOT P & M (3771-15) #5 REBAR
Grid Coordinates N 814409.31818 E 951132.00122
Ground Coordinates (Pt 15) N 814546.13895 E 951291.79140

ADOT P & M (3771-17) #5 REBAR
Grid Coordinates N 814971.84188 E 951011.52773
Ground Coordinates (Pt 17) N 815108.75715 E 951171.29767

ADOT P & M (MP 164.05) #5 REBAR
Grid Coordinates N 814968.51993E 951063.18248
Ground Coordinates (Pt 31) N 815105.43464 E 951222.96109

THE FOLLOWING PARAMETERS WERE SET FOR THE BASIS OF THIS SURVEY:

SYSTEM:	UNITED STATES STATE PLANE 1983
ZONE:	ARIZONA CENTRAL 0202
DATUM:	NORTH AMERICAN 1983 (CONUS) EQUIVALENT TO WGS-84
GEOID MODEL:	GEOID03 (CONTINENTAL US)

UNITS = INTERNATIONAL FEET (1 FOOT = 0.3048 METERS EXACTLY)

DIRECT SATELLITE OBSERVATIONS WERE MADE ON EACH POINT ON THE NORTH AMERICAN DATUM OF 1983 WITH AUTOMATIC TRANSLATIONS MADE TO THE STATE PLANE GRID SYSTEM.

GPS CALIBRATION AND TRANSLATION TO THE SURFACE WAS PERFORMED BY GPS SURVEY SOFTWARE A GRID ADJUSTMENT FACTOR OF 1.000168, AS OBTAINED FROM ADOT (P & M JOB NO. 3771) AND SCALE ORIGIN VALUES OF N=0.00, E=0.00, WERE USED FOR THE TRANSLATION TO THE SURFACE.

ALL BEARINGS ARE GRID BEARINGS, DISTANCES ARE GROUND DISTANCES AND COORDINATES ARE GROUND COORDINATES.

THE INFORMATION SHOWN ON THIS "RESULTS OF SURVEY" WAS BASED ON AN OBSERVATION AND EVALUATION OF PHYSICAL CORROBORATING EVIDENCE IN THE FIELD; AND A REVIEW AND ANALYSIS OF EXISTING DRAWINGS, PLATS, AND NOTES AVAILABLE AT THE TIME THE SURVEY WAS PREPARED.

THIS RESULTS OF SURVEY IS ON FILE IN THE FILE ROOM OF THE RIGHT OF WAY PLANS SECTION OF THE ARIZONA DEPARTMENT OF TRANSPORTATION, 205 SOUTH 17TH AVENUE, MD 612E, PHOENIX, AZ 85007. (602) 712-7270. SEE ADOT R/W FILE COPY FOR MOST CURRENT ADDITIONS OR REVISIONS.

MISCELLANEOUS MONUMENTATION

PT.	NORTHING	EASTING	DESCRIPTION
300	818661.86112	951118.08297	BCF

Click here for SR 177 Index

...\DGN\ROS\177RW163_RS03.DGN

DRAWING NO.	D-11-T-481	ARIZONA DEPARTMENT OF TRANSPORTATION INTERMODAL TRANSPORTATION DIVISION RIGHT OF WAY PLANS SECTION
SURVEY	APR 07	
DRAWN/DATE	C. DOYLE/APR 07	HIGHWAY NAME: WINKELMAN - SUPERIOR
ADOT REVIEW	J. TUZYK	FEDERAL AID NO.: UNASSIGNED
eps group, Inc. Engineers, Planners & Surveyors		PROJECT NO.: 177 PN 163 H6921 01R
ROUTE NO.: S.R. 177	LOCATION: MP 163.7 - OLD HWY 177	SHEET RS-3

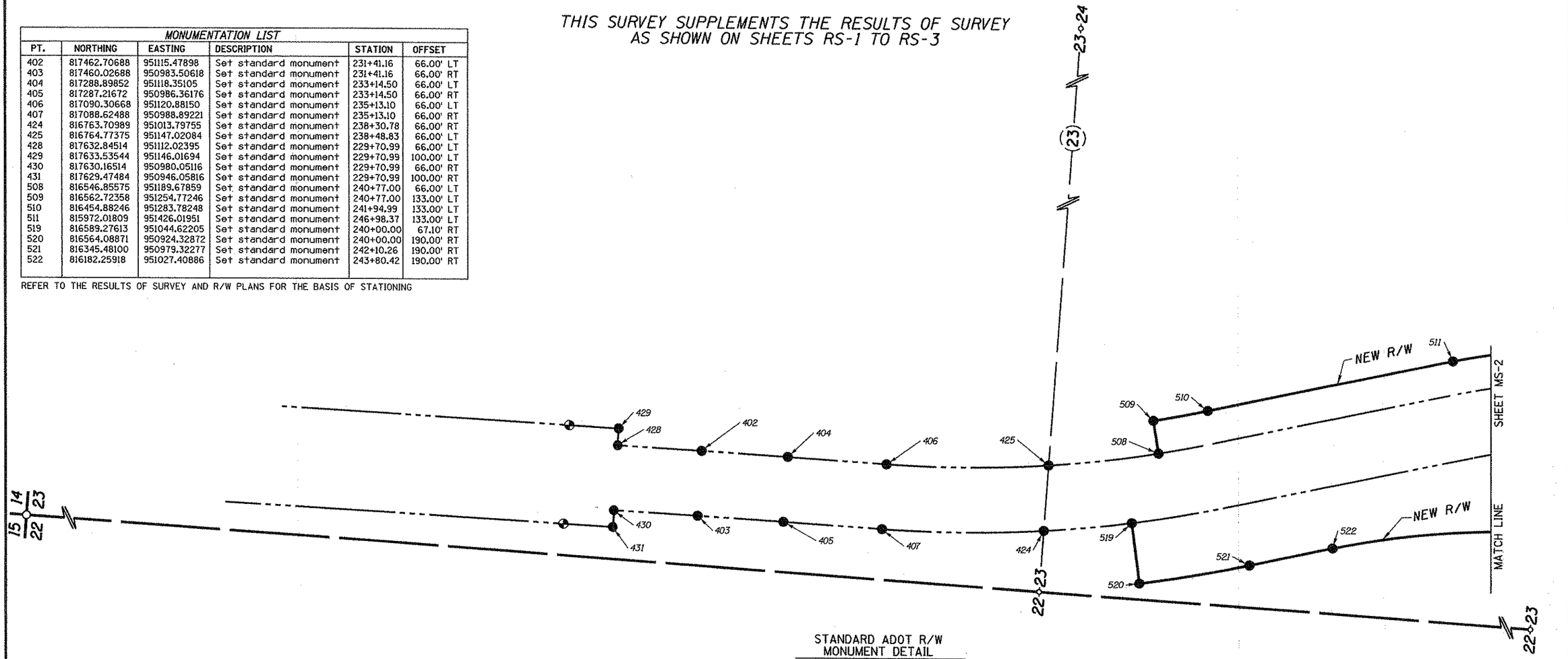
Certificate Land Surveyor 15573 GERALD HUGHES Date Signed 7/25/07 ARIZONA, U.S.A.

RIGHT OF WAY MONUMENTATION SURVEY

THIS SURVEY SUPPLEMENTS THE RESULTS OF SURVEY AS SHOWN ON SHEETS RS-1 TO RS-3

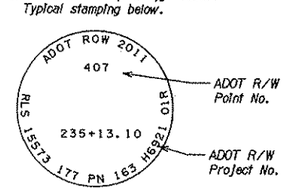
MONUMENTATION LIST					
PT.	NORTHING	EASTING	DESCRIPTION	STATION	OFFSET
402	817462.70688	951115.47898	Set standard monument	231+41.16	66.00' LT
403	817460.02688	950983.50618	Set standard monument	231+41.16	66.00' RT
404	817288.89852	951118.35105	Set standard monument	233+14.50	66.00' LT
405	817287.21672	950986.36176	Set standard monument	233+14.50	66.00' RT
406	817090.30668	951120.88150	Set standard monument	235+13.10	66.00' LT
407	817088.62488	950988.89221	Set standard monument	235+13.10	66.00' RT
424	816763.70989	951013.79755	Set standard monument	238+30.78	66.00' RT
425	816764.77375	951147.02084	Set standard monument	238+48.83	66.00' LT
428	817632.84514	951112.02395	Set standard monument	229+70.99	66.00' LT
429	817633.53544	951146.01694	Set standard monument	229+70.99	100.00' LT
430	817630.16514	950980.05116	Set standard monument	229+70.99	66.00' RT
431	817629.47484	950946.05816	Set standard monument	229+70.99	100.00' RT
508	816546.85575	951189.67859	Set standard monument	240+77.00	66.00' LT
509	816562.72358	951254.77246	Set standard monument	240+77.00	133.00' LT
510	816454.88246	951283.78248	Set standard monument	241+94.99	133.00' LT
511	815972.01809	951426.01951	Set standard monument	246+98.37	133.00' LT
519	816589.27613	951044.62205	Set standard monument	240+00.00	67.10' RT
520	816564.08871	950924.32872	Set standard monument	240+00.00	190.00' RT
521	816345.48100	950979.32277	Set standard monument	242+10.26	190.00' RT
522	816182.25918	951027.40886	Set standard monument	243+80.42	190.00' RT

REFER TO THE RESULTS OF SURVEY AND R/W PLANS FOR THE BASIS OF STATIONING



STANDARD ADOT R/W MONUMENT DETAIL

Unless otherwise noted, all set monuments are 3-1/4" aluminum cap on 5/8" rebar. Typical stamping below.



Click here for SR 177 Index

LEGEND

- 302 Set Monument
- 300 Found Monument
- New R/W monument
- 301 Calculated position
- Existing ADOT R/W monument

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CHANGE ORDER REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION OF REVISIONS

DRAWING NO.	D-11-T-481
SURVEY	SEPT 2011
DRAWN/DATE	J.KRAFT/DEC 10
ADOT REVIEW	S.PARKER

eps group, inc. Engineers, Planners & Surveyors

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
RIGHT OF WAY PLANS SECTION

HIGHWAY NAME: WINKELMAN - SUPERIOR

FEDERAL AID NO.: UNASSIGNED

PROJECT NO.: 177 PN 163 H6921 01R

ROUTE NO.: S.R. 177

LOCATION: MP 163.7 - APACHE LEAP ROAD

Registered Land Surveyor, Certificate No. 15573, GERALD HUGHES, Date Signed 4/3/2011, ARIZONA, U.S.A.

EXPIRES: 3/31/2012

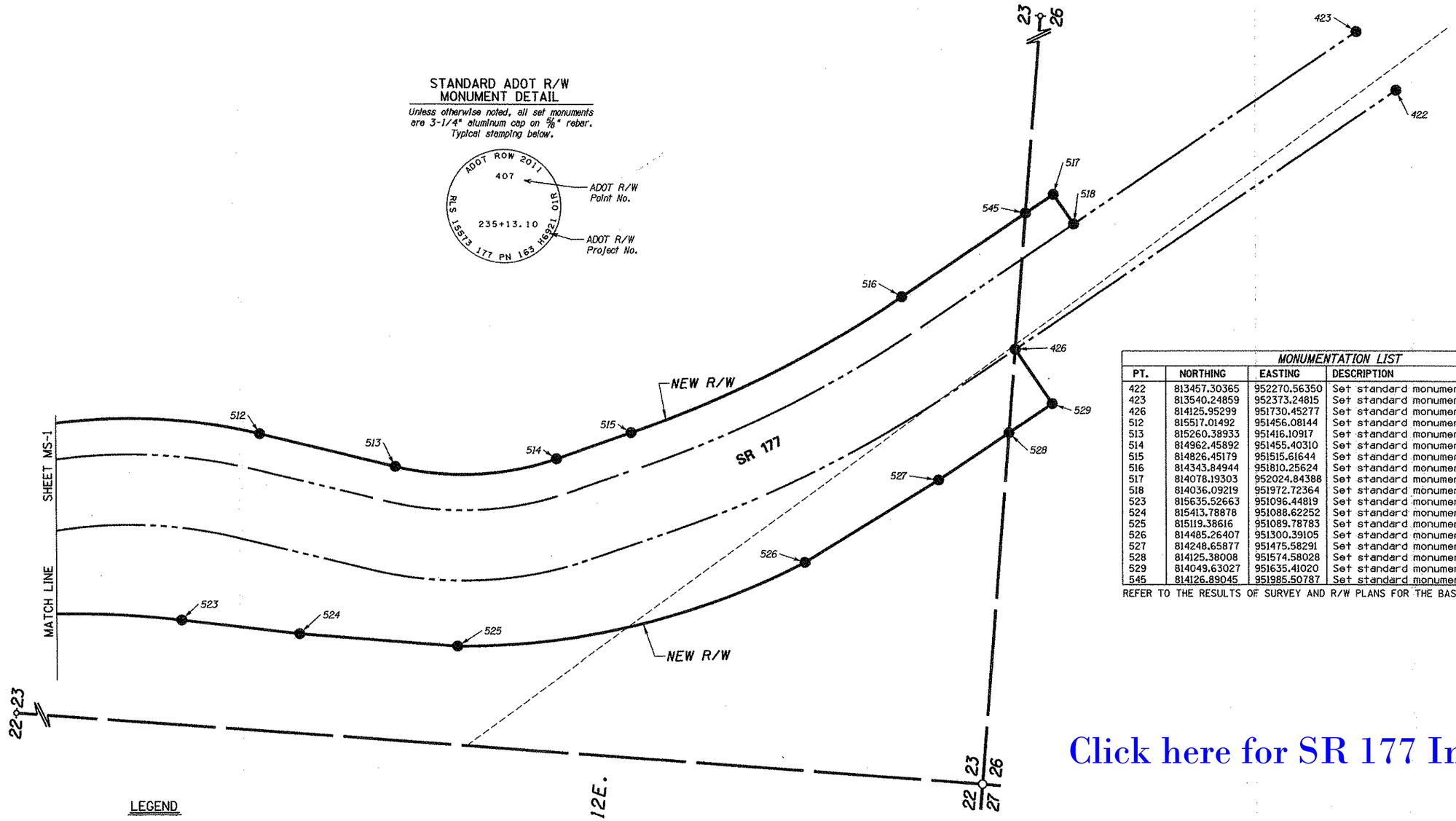
SHEET MS-1

RIGHT OF WAY MONUMENTATION SURVEY

THIS SURVEY SUPPLEMENTS THE RESULTS OF SURVEY AS SHOWN ON SHEETS RS-1 TO RS-3

STANDARD ADOT R/W MONUMENT DETAIL

Unless otherwise noted, all set monuments are 3-1/4" aluminum cap on ⅝" rebar. Typical stamping below.



MONUMENTATION LIST

PT.	NORTHING	EASTING	DESCRIPTION	STATION	OFFSET
422	813457.30365	952270.56350	Set standard monument	274+69.41	66.00' RT
423	813540.24859	952373.24815	Set standard monument	274+69.41	66.00' LT
426	814125.95299	951730.45277	Set standard monument	266+00.81	68.11' RT
512	815517.01492	951456.08144	Set standard monument	250+99.43	133.00' LT
513	815260.38933	951416.10917	Set standard monument	253+59.15	133.00' LT
514	814962.45892	951455.40310	Set standard monument	257+39.77	133.00' LT
515	814826.45179	951515.61644	Set standard monument	258+88.51	133.00' LT
516	814343.84944	951810.25624	Set standard monument	264+90.51	133.00' LT
517	814078.19303	952024.84388	Set standard monument	268+32.00	133.00' LT
518	814036.09219	951972.72364	Set standard monument	268+32.00	66.00' LT
523	815635.52663	951096.44819	Set standard monument	249+95.01	190.00' RT
524	815413.78878	951088.62252	Set standard monument	252+16.89	190.00' RT
525	815119.38616	951089.78783	Set standard monument	254+89.89	190.00' RT
526	814485.26407	951300.39105	Set standard monument	260+72.56	190.00' RT
527	814248.65877	951475.58291	Set standard monument	263+45.56	190.00' RT
528	814125.38008	951574.58028	Set standard monument	265+03.66	190.00' RT
529	814049.63027	951635.41020	Set standard monument	266+00.81	190.00' RT
545	814126.89045	951985.50787	Set standard monument	267+69.40	133.00' LT

REFER TO THE RESULTS OF SURVEY AND R/W PLANS FOR THE BASIS OF STATIONING

Click here for SR 177 Index

LEGEND

- 302 Set Monument
- 300 Found Monument
- New R/W monument
- 301 Calculated position
- Existing ADOT R/W monument

0 50 100
Scale

...\DGN\RWFMS\177RW163_MS02.DGN

CHANGE ORDER REVISIONS			
C.O. NO.	DATE	BY	DESCRIPTION OF REVISIONS

DRAWING NO.	D-11-T-481
SURVEY	SEPT 2011
DRAWN/DATE	J.KRAFT/DEC 10
ADOT REVIEW	S.PARKER

eps group, inc. Engineers, Planners & Surveyors

ARIZONA DEPARTMENT OF TRANSPORTATION
INTERMODAL TRANSPORTATION DIVISION
RIGHT OF WAY PLANS SECTION

HIGHWAY NAME: WINKELMAN - SUPERIOR
FEDERAL AID NO.: UNASSIGNED
PROJECT NO.: 177 PN 163 H6921 01R
ROUTE NO.: S.R. 177
LOCATION: MP 163.7 - APACHE LEAP ROAD

REGISTERED LAND SURVEYOR CERTIFICATE NO. 15873 GERALD HUGHES Expires 03-31-2012

SHEET MS-2