

SPECIFIC PURPOSE SURVEY SURVEYOR'S REPORT  
TO ESTABLISH ELEVATIONS AT WELL SITES PMW-1, PMW-103 and PMW-106 ADJACENT TO THE L-8 RESERVOIR  
FEBRUARY 2015



L-8 WELL SITE PMW-1

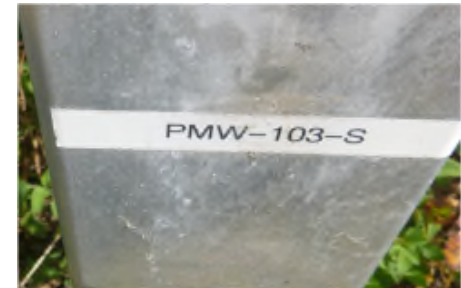
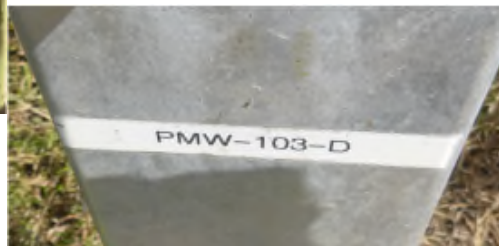
WELL SITE	SITE BM ELEV	SITE BENCH MARK	BM LOCATION DESCRIPTION	DESIGNATION	WELL ORIENTATION	TOP OF PIPE ELEVATION (NAVD88)	GROUND ELEVATION (NAVD88)	FIELD BOOK	PAGES
PMW-1	11.41	SET A POURED IN PLACE CONCRETE MONUMENT WITH 2" SFWMD ALUMINUM DISK STAMPED "BM PMW 1 2015"	BM IS 15' +/- NORTH OF A DIRT/ROCK ROAD; 5' +/- SOUTH OF A DRAINAGE DITCH AND 5.0' +/- WEST OF THE EAST WELL	PMW-1-D	EAST	14.41	11.7	MISC 6-D	68-71
				PMW-1-S	WEST	14.67	11.7		





L-8 WELL SITE PMW-103

WELL SITE	SITE BM ELEV	SITE BENCH MARK	BM LOCATION DESCRIPTION	DESIGNATION	WELL ORIENTATION	TOP OF PIPE ELEVATION (NAVD88)	GROUND ELEVATION (NAVD88)	FIELD BOOK	PAGES
PMW-103	17.58	SET A POURED IN PLACE CONCRETE MONUMENT WITH 2" SFWMD ALUMINUM DISK STAMPED "BM PMW 103 2015"	BM IS 10.7' +/- EAST OF A DIRT /ROCK ROAD; 3.7' WEST OF A DRAINAGE DITCH, 5.3' +/- OF THE NORTH WELL AND 4.30' +/- NORTH OF THE SOUTH WELL	PMW-103-D	NORTH	20.58	18.07	MISC 6-D	68-71
				PMW-103-S	SOUTH	20.76			



L-8 WELL SITE PMW-106

WELL SITE	SITE BM ELEV	SITE BENCH MARK	BM LOCATION DESCRIPTION	DESIGNATION	WELL ORIENTATION	TOP OF PIPE ELEVATION (NAVD88)	GROUND ELEVATION (NAVD88)	FIELD BOOK	PAGES
PMW-106	14.54	SET A POURED IN PLACE CONCRETE MONUMENT WITH 2" SFWMD ALUMINUM DISK STAMPED "BM PMW-106 2015"	BM IS 15' +/- NORTH OF A DIRT/ROCK ROAD AND 5' +/- SOUTH OF A DRAINAGE DITCH	PMW-106-D	NORTH	17.82	14.9	MISC 6-D	68-71
				PMW-106-S	SOUTH	17.51	15.0		





SPECIFIC PURPOSE SURVEY SURVEYOR'S REPORT  
TO ESTABLISH ELEVATIONS AT WELL SITES PMW-01, PMW-103 and PMW-106 ADJACENT TO THE L-8 RESERVOIR  
FEBRUARY 2015

**TASK**

Establish an elevation on top of the PVC wells at sites: PMW-01, PMW-103 and PMW-106 in Palm Beach County, FL as depicted hereon.

**METHODOLOGY**

Elevations shown hereon are based on the North American Vertical Datum of 1988 (NAVD88). A permanent benchmark was set at each site. Conventional leveling was used to establish elevations.

**FIELD STAFF**

SFWMD Staff: Alan Giammarco, Ryan Kett, Tim Mayer and Ronnie Hudson.

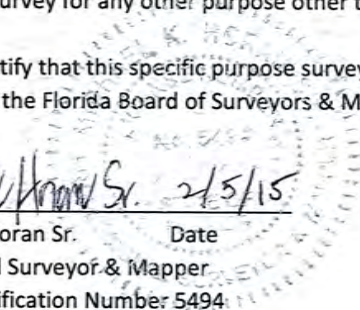
**SURVEYOR'S NOTES**

1. Field work was performed on January 12, 14 and 21st, 2015; Field Notes are in SFWMD MISC Field Book #6-O pages 68-69-70-71.
2. This survey utilized third order differential leveling procedures. Equipment: Trimble DiNi Digital Level & Bar Coded Rods. Data file "PMWWELLS.dat"
3. Originating benchmarks for the elevations depicted hereon:  
    "L-8 RES Site # 6 2010" set by Whidden Surveying and Mapping; drawing #4600000943-WO11, sheet 2 of 31; Elevation 15.74 NAVD88.  
    "BM L8FEB4 2014" per SFWMD Misc FB 6-T page 17; Elevation: 18.05 NAVD88.
4. To convert from NAVD88 to NGVD29, add 1.46.
5. All measurements are in U.S. Survey feet and decimal parts thereof.

**CERTIFICATION**

This certification is made to the South Florida Water Management District for the specific purpose of establishing elevations at the above-listed well sites as requested by Greg Coffelt of the South Florida Water Management District. No responsibility or liability is assumed by the undersigned surveyor and mapper for use of this survey for any other purpose other than stated above or for any use by any person or entity other than the South Florida Water Management District.

I hereby certify that this specific purpose survey was made under my responsible charge and meets the applicable minimum technical standards for surveys as set forth by the Florida Board of Surveyors & Mappers, Chapter 5J-17.051, Florida Administrative Code, pursuant to Section 472.027, Florida State Statues.

A circular professional seal for Michael K. Horan Sr., a Professional Surveyor & Mapper in Florida, with certification number 5494. The seal contains the text "FLORIDA BOARD OF SURVEYORS & MAPPERS" around the perimeter and "MICHAEL K. HORAN SR." in the center.  
*Michael K Horan Sr.*    *2/5/15*  
Michael K Horan Sr.                      Date  
Professional Surveyor & Mapper  
Florida Certification Number: 5494



L-S ESTABLISH ELEVATIONS @ WELL SITES

PMW1, PMW-106, PMW 103 FILENAME: PMW WELLS

(LINE 1) (CHECK B.M. LB FEB 4 - B.M. LB FEB 5)

PT #

ELEV. ELEV. ADJ. ELEV.  
POST

1	15.74	15.74	
14	18.016	18.05	
	B.S. DIST 2772.40		
	F.S. DIST 2804.46	DIF = 0.034 Low	

(LINE 2)

1	15.74		
22	14.54		14.541*
25	15.737		15.74
	B.S. DIST 715.32		
	F.S. DIST 710.23		

(LINE 3)

22	14.54		
38	17.577		17.581*
47	14.537	14.54	14.54
	B.S. DIST 3952.88		
	F.S. DIST 3964.76		

NAVD 88

TRIMBLE DINI

FOLDING BARCODED RODS

A. Giannarco

R. KETT

T. MAYER

COMMENT

LB FEB 5 FD POURED IN PLACE CONCRETE MONUMENT WITH  
2" SFWM D ALUMN. CAP STAMPED LB 7232 LB RES SITE #6

LB FEB 4 FD 2" SFWM D ALUMN. CAP SET IN CONCRETE STEP LANDING  
STAMPED LB FEB 4 B.M. 2014

LB FEB 5 SEE ABOVE

PMW 106 B.M. P.I.P. MONUMENT / 2" S.F.W.M.D ALUMN. DISK STAMPED  
"B.M. PMW 106 2015"

LB FEB 5 SEE ABOVE

PMW 106 SEE ABOVE

PMW 103 B.M. P.I.P. CONC. MON. w/ 2" SFWM D ALUMN. DISK STAMPED  
"B.M. PMW 103 2015"

PMW 106 SEE ABOVE



67 Misc FB 60 1/14/15

# L8 ESTABLISH ELEVATION @ Wells

SITE PMW1

(LINE 4)

PT#	ELEV.	ELEV POST	ADJ ELEV
14		18.05	

67	11.41		
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11.411 \*

85	18.047	18.05	
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BS DIST = 6979.38  
FS DIST = 6968.16

Misc FB 60 1/14/15

NAVD 88  
TRIMBLE D.II  
Folding BAR CODED RODS

A Grammarco  
T. Mayer

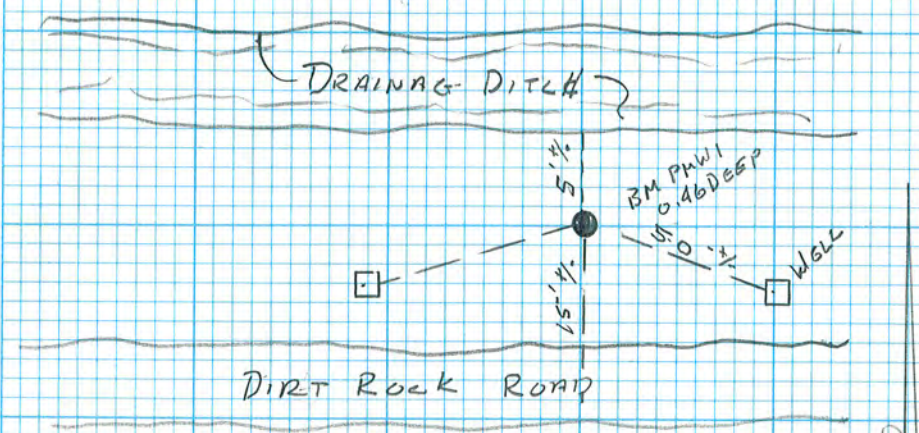
L8 FEB 4 SEE PG 68 Misc FB 60

BM P.M.W.1 SET POURED IN PLACE CONCRETE MONUMENT  
WITH 2" S.F.W.M.D ALUMN. CAP STAMPED P.M.W.1 BM  
2015



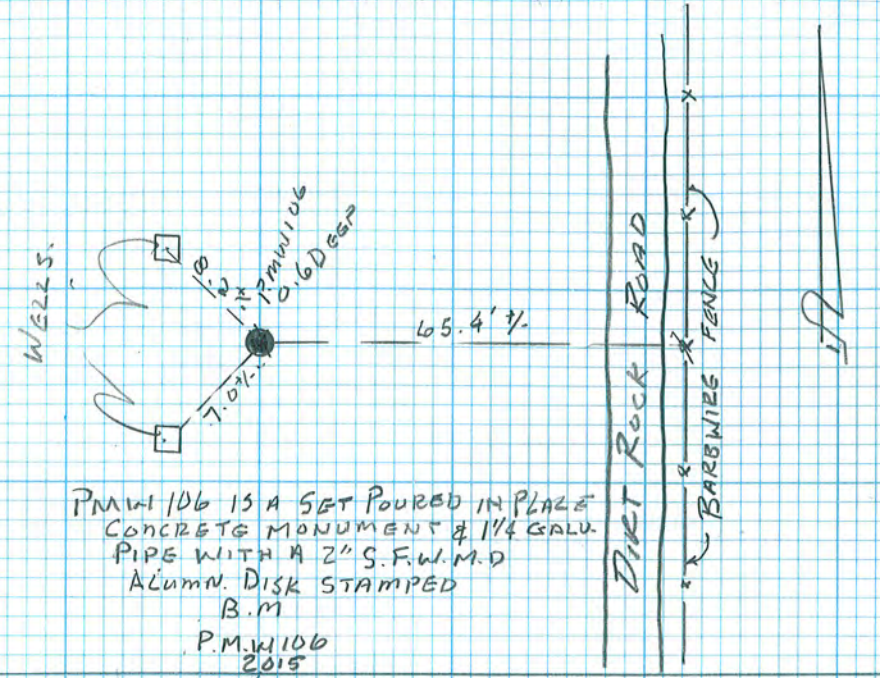
LG REF. FOR BENCH MARKS SET AT WELL SITES PMW1, PMW103, PMW106

SITE PMW1



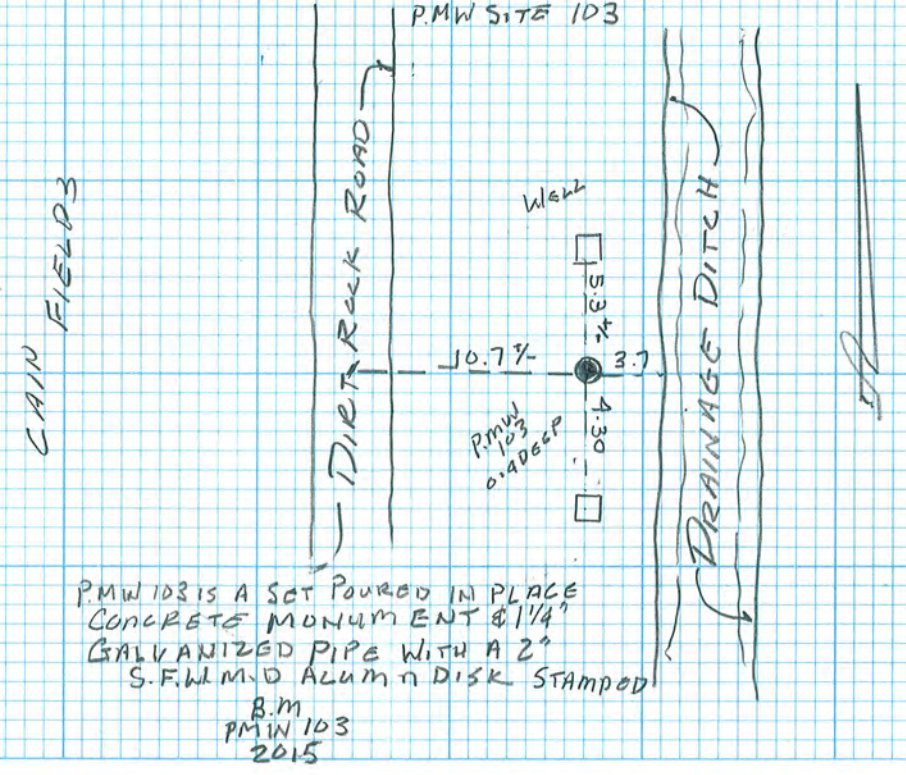
PMW1 IS A Poured IN PLACE CONCRETE MONUMENT  $\phi$  1 1/4 GALVANIZED PIPE WITH A 2" S.F.W.M.D. ALUMN. DISK 0.46 BELOW GROUND GRADE STAMPED B.M. P.M.W.1 2015 CAINE FIELDS

PMW SITE 106



PMW106 IS A SET Poured IN PLACE CONCRETE MONUMENT  $\phi$  1 1/4 GALV. PIPE WITH A 2" S.F.W.M.D. ALUMN. DISK STAMPED B.M. P.M.W.106 2015

P.M.W SITE 103



PMW103 IS A SET Poured IN PLACE CONCRETE MONUMENT  $\phi$  1 1/4 GALVANIZED PIPE WITH A 2" S.F.W.M.D. ALUMN DISK STAMPED B.M. P.M.W.103 2015



L8 RES, ESTABLISH ELEVATIONS ON WELLS & PMW 1, PMW 103, & PMW 106

(PMW 1)

B.m	+	HI	-	ELEV
PMW 1.	4.72	16.131		11.411
			1.72	14.411
			1.37	14.671
			4.72	11.411 ✓

(PMW 103)

PMW 103	4.74	22.321		17.581
			1.56	20.761
			1.74	20.581
			4.74 ✓	

(PMW 106)

PMW 106	5.79	20.331		14.541
			2.51	17.821
			2.75	17.581
			5.79 ✓	

NAVD 88  
ZEISS N. 2  
25' ROD

A Grammaero  
R HUDSON

COMMENT

SEE PG 69 MISC FB 6-0

V CUT IN P.V.C. PIPE PMW 1 D

V CUT IN PVC. PIPE PMW 1-S

SEE PG 68 MISC FB 6-0

PMW 103 S V CUT ON P.V.C. PIPE

PMW 103 D V CUT ON PVC. PIPE

SEE PG 68 MISC FB 6-0

PMW 106 D V CUT IN METAL CASE } PIPES TOO LOW AND  
 PMW 106 S V CUT IN METAL CASE } FLIMSLEY



Project Information		Coordinate System	
Name:		Name:	Default
Size:		Datum:	WGS 1984
Modified:	2/15/2012 8:48:57 AM (UTC:-7)	Zone:	Default
Time zone:	Mountain Standard Time	Geoid:	
Reference number:		Vertical datum:	
Description:			

## Level Report

**Imported file:** [PMWELLS.DAT](#)  
**Instrument:** DiNi  
**Standard error per kilometer of double leveling:** 0.00230 ft  
**Standard error per turn/station setup:** 0.00000 ft  
**Creation option:** Delta elevations  
**Description usage:** Field notes

### Run - 1 Raw Observations

**Raw Misclosure:** -0.03600 ft  
 **$\Sigma$  BS Distances:** 2772.400 ft  
 **$\Sigma$  FS Distances:** 2804.460 ft  
**Run Length:** 5576.860 ft  
**Reduction:** Adjusted Values

Create	Point ID	BS	IS	FS	$\Delta$ Elevation	Raw Elevation	Correction	Adj. Elevation	Type	Distance	Description
<input checked="" type="checkbox"/>	1	<input checked="" type="checkbox"/> 4.53600 ft			0.00000 ft	15.740 ft	0.00000 ft	15.740 ft	Benchmark	77.560 ft	FEB5 3
<input type="checkbox"/>	2			<input checked="" type="checkbox"/> 5.11900 ft	-0.58300 ft	15.157 ft	0.00035 ft	15.157 ft	Computed	77.850 ft	3
	2	<input checked="" type="checkbox"/> 4.83200 ft								227.430 ft	3
<input type="checkbox"/>	3			<input checked="" type="checkbox"/> 4.48200 ft	0.35000 ft	15.507 ft	0.00332 ft	15.510 ft	Computed	226.540 ft	3
	3	<input checked="" type="checkbox"/> 4.66000 ft								237.430 ft	3
<input type="checkbox"/>	4			<input checked="" type="checkbox"/> 4.90400 ft	-0.24400 ft	15.263 ft	0.00654 ft	15.270 ft	Computed	234.550 ft	3
	4	<input checked="" type="checkbox"/> 4.70700 ft								236.120 ft	3
<input type="checkbox"/>	5			<input checked="" type="checkbox"/> 5.25900 ft	-0.55200 ft	14.711 ft	0.00980 ft	14.721 ft	Computed	239.440 ft	3
	5	<input checked="" type="checkbox"/> 5.31300 ft								236.710 ft	3
<input type="checkbox"/>	6					15.264 ft	0.01307 ft	15.277 ft	Computed		3



			<input checked="" type="checkbox"/> 4.76000 ft	0.55300 ft						239.400 ft	
	6	<input checked="" type="checkbox"/> 4.93000 ft								230.710 ft	3
<input type="checkbox"/>	7		<input checked="" type="checkbox"/> 4.79100 ft	0.13900 ft	15.403 ft	0.01611 ft	15.419 ft	Computed		227.760 ft	3
	7	<input checked="" type="checkbox"/> 4.80200 ft								232.320 ft	3
<input type="checkbox"/>	8		<input checked="" type="checkbox"/> 5.23800 ft	-0.43600 ft	14.967 ft	0.01924 ft	14.986 ft	Computed		233.790 ft	3
	8	<input checked="" type="checkbox"/> 4.86200 ft								231.330 ft	3
<input type="checkbox"/>	9		<input checked="" type="checkbox"/> 4.25400 ft	0.60800 ft	15.575 ft	0.02237 ft	15.597 ft	Computed		234.610 ft	3
	9	<input checked="" type="checkbox"/> 4.44600 ft								232.120 ft	3
<input type="checkbox"/>	10		<input checked="" type="checkbox"/> 4.69000 ft	-0.24400 ft	15.331 ft	0.02545 ft	15.356 ft	Computed		229.400 ft	3
	10	<input checked="" type="checkbox"/> 4.84400 ft								232.480 ft	3
<input type="checkbox"/>	11		<input checked="" type="checkbox"/> 4.91200 ft	-0.06800 ft	15.263 ft	0.02862 ft	15.292 ft	Computed		236.420 ft	3
	11	<input checked="" type="checkbox"/> 4.62200 ft								228.050 ft	3
<input type="checkbox"/>	12		<input checked="" type="checkbox"/> 4.63600 ft	-0.01400 ft	15.249 ft	0.03169 ft	15.281 ft	Computed		232.870 ft	3
	12	<input checked="" type="checkbox"/> 4.62400 ft								224.410 ft	3
<input type="checkbox"/>	13		<input checked="" type="checkbox"/> 4.82400 ft	-0.20000 ft	15.049 ft	0.03456 ft	15.084 ft	Computed		222.080 ft	3
	13	<input checked="" type="checkbox"/> 5.17400 ft								145.730 ft	3
<input checked="" type="checkbox"/>	14		<input checked="" type="checkbox"/> 2.20900 ft	2.96500 ft	18.014 ft	0.03600 ft	18.050 ft	Benchmark		169.750 ft	FEB4 3

### Run - 1 (N1) Reduced Observations

Observation	Status	Raw $\Delta$ Elevation	Correction	Final $\Delta$ Elevation	Setups	Length	$\Sigma$ BS Readings	$\Sigma$ FS Readings	Std. Error
1-14 (E1)	Enabled	2.27400 ft	0.03600 ft	2.31000 ft	13	5576.860 ft	62.35200 ft	60.07800 ft	0.04120 ft

### Run - 1 (N1) Reduced Coordinates

Point ID	Status	Elevation
1	Enabled	15.74000 ft
14	Enabled	18.05000 ft



### Run - 2 Raw Observations

Raw Misclosure: -0.00300 ft

$\Sigma$  BS Distances: 715.320 ft

$\Sigma$  FS Distances: 710.240 ft

Run Length: 1425.560 ft

Reduction: Adjusted Values

Create	Point ID	BS	IS	FS	$\Delta$ Elevation	Raw Elevation	Correction	Adj. Elevation	Type	Distance	Description
<input checked="" type="checkbox"/>	1	<input checked="" type="checkbox"/> 4.99000 ft			0.00000 ft	15.740 ft	0.00000 ft	15.740 ft	Benchmark	120.080 ft	FEB5 3
<input type="checkbox"/>	20			<input checked="" type="checkbox"/> 4.44500 ft	0.54500 ft	16.285 ft	0.00050 ft	16.285 ft	Computed	119.130 ft	3
	20	<input checked="" type="checkbox"/> 4.62700 ft								139.630 ft	3
<input type="checkbox"/>	21			<input checked="" type="checkbox"/> 4.54600 ft	0.08100 ft	16.366 ft	0.00118 ft	16.367 ft	Computed	141.540 ft	3
	21	<input checked="" type="checkbox"/> 6.07500 ft								94.260 ft	3
<input checked="" type="checkbox"/>	22			<input checked="" type="checkbox"/> 7.90100 ft	-1.82600 ft	14.540 ft	0.00150 ft	14.541 ft	Computed	97.900 ft	BM106 3
	22	<input checked="" type="checkbox"/> 7.63700 ft								98.420 ft	BM106 3
<input type="checkbox"/>	23			<input checked="" type="checkbox"/> 5.87000 ft	1.76700 ft	16.307 ft	0.00182 ft	16.309 ft	Computed	93.960 ft	3
	23	<input checked="" type="checkbox"/> 4.63900 ft								143.210 ft	3
<input type="checkbox"/>	24			<input checked="" type="checkbox"/> 4.64200 ft	-0.00300 ft	16.304 ft	0.00250 ft	16.307 ft	Computed	137.300 ft	3
	24	<input checked="" type="checkbox"/> 4.44300 ft								119.720 ft	3
	1			<input checked="" type="checkbox"/> 5.01000 ft	-0.56700 ft	15.737 ft	0.00300 ft	15.740 ft	Benchmark	120.410 ft	FEB5 3

### Run - 2 (N2) Reduced Observations

Observation	Status	Raw $\Delta$ Elevation	Correction	Final $\Delta$ Elevation	Setups	Length	$\Sigma$ BS Readings	$\Sigma$ FS Readings	Std. Error
<a href="#">1-22 (E2)</a>	Enabled	-1.20000 ft	0.00150 ft	-1.19850 ft	3	712.540 ft	15.69200 ft	16.89200 ft	0.01086 ft
<a href="#">22-1 (E3)</a>	Enabled	1.19700 ft	0.00150 ft	1.19850 ft	3	713.020 ft	16.71900 ft	15.52200 ft	0.01086 ft

### Run - 3 Raw Observations

Raw Misclosure: -0.00400 ft

$\Sigma$  BS Distances: 3952.880 ft

$\Sigma$  FS Distances: 3964.750 ft

Run Length: 7917.630 ft



## Reduction: Adjusted Values

Create	Point ID	BS	IS	FS	Δ Elevation	Raw Elevation	Correction	Adj. Elevation	Type	Distance	Description
<input checked="" type="checkbox"/>	22	<input checked="" type="checkbox"/> 7.02100 ft			0.00000 ft	14.540 ft	0.00150 ft	14.541 ft	Computed	155.740 ft	BM106 3
<input type="checkbox"/>	30			<input checked="" type="checkbox"/> 5.34900 ft	1.67200 ft	16.212 ft	0.00161 ft	16.214 ft	Computed	152.690 ft	3
	30	<input checked="" type="checkbox"/> 4.84800 ft								229.070 ft	3
<input type="checkbox"/>	31			<input checked="" type="checkbox"/> 4.14600 ft	0.70200 ft	16.914 ft	0.00184 ft	16.916 ft	Computed	220.110 ft	3
	31	<input checked="" type="checkbox"/> 4.53900 ft								223.650 ft	3
<input type="checkbox"/>	32			<input checked="" type="checkbox"/> 4.56200 ft	-0.02300 ft	16.891 ft	0.00206 ft	16.893 ft	Computed	219.650 ft	3
	32	<input checked="" type="checkbox"/> 4.58900 ft								227.820 ft	3
<input type="checkbox"/>	33			<input checked="" type="checkbox"/> 3.88700 ft	0.70200 ft	17.593 ft	0.00230 ft	17.595 ft	Computed	229.200 ft	3
	33	<input checked="" type="checkbox"/> 4.02000 ft								228.080 ft	3
<input type="checkbox"/>	34			<input checked="" type="checkbox"/> 4.84300 ft	-0.82300 ft	16.770 ft	0.00254 ft	16.773 ft	Computed	233.270 ft	3
	34	<input checked="" type="checkbox"/> 4.67600 ft								232.280 ft	3
<input type="checkbox"/>	35			<input checked="" type="checkbox"/> 4.22700 ft	0.44900 ft	17.219 ft	0.00277 ft	17.222 ft	Computed	224.150 ft	3
	35	<input checked="" type="checkbox"/> 4.36600 ft								230.220 ft	3
<input type="checkbox"/>	36			<input checked="" type="checkbox"/> 3.40000 ft	0.96600 ft	18.185 ft	0.00301 ft	18.188 ft	Computed	223.260 ft	3
	36	<input checked="" type="checkbox"/> 3.48500 ft								229.460 ft	3
<input type="checkbox"/>	37			<input checked="" type="checkbox"/> 4.53300 ft	-1.04800 ft	17.137 ft	0.00325 ft	17.140 ft	Computed	227.850 ft	3
	37	<input checked="" type="checkbox"/> 4.73200 ft								233.270 ft	3
<input type="checkbox"/>	38			<input checked="" type="checkbox"/> 4.29200 ft	0.44000 ft	17.577 ft	0.00350 ft	17.581 ft	Computed	240.780 ft	BM103 3
	38	<input checked="" type="checkbox"/> 4.37600 ft								239.240 ft	BM103 3
<input type="checkbox"/>	39			<input checked="" type="checkbox"/> 4.87300 ft	-0.49700 ft	17.080 ft	0.00375 ft	17.084 ft	Computed	233.270 ft	3
	39	<input checked="" type="checkbox"/> 4.74700 ft								227.360 ft	3
<input type="checkbox"/>	40			<input checked="" type="checkbox"/> 3.63200 ft	1.11500 ft	18.195 ft	0.00399 ft	18.199 ft	Computed	231.200 ft	3
	40	<input checked="" type="checkbox"/> 3.41100 ft								220.410 ft	3



<input type="checkbox"/>	41		<input checked="" type="checkbox"/>	4.40100 ft	-0.99000 ft	17.205 ft	0.00422 ft	17.209 ft	Computed	230.310 ft	3
	41	<input checked="" type="checkbox"/>	4.36200 ft							224.870 ft	3
<input type="checkbox"/>	42		<input checked="" type="checkbox"/>	4.79500 ft	-0.43300 ft	16.772 ft	0.00446 ft	16.776 ft	Computed	233.560 ft	3
	42	<input checked="" type="checkbox"/>	4.74300 ft							232.580 ft	3
<input type="checkbox"/>	43		<input checked="" type="checkbox"/>	3.97100 ft	0.77200 ft	17.544 ft	0.00470 ft	17.549 ft	Computed	228.050 ft	3
	43	<input checked="" type="checkbox"/>	3.84900 ft							229.560 ft	3
<input type="checkbox"/>	44		<input checked="" type="checkbox"/>	4.51100 ft	-0.66200 ft	16.882 ft	0.00494 ft	16.887 ft	Computed	228.050 ft	3
	44	<input checked="" type="checkbox"/>	4.43000 ft							220.440 ft	3
<input type="checkbox"/>	45		<input checked="" type="checkbox"/>	4.43800 ft	-0.00800 ft	16.874 ft	0.00517 ft	16.879 ft	Computed	225.200 ft	3
	45	<input checked="" type="checkbox"/>	4.21600 ft							216.140 ft	3
<input type="checkbox"/>	46		<input checked="" type="checkbox"/>	4.57400 ft	-0.35800 ft	16.516 ft	0.00539 ft	16.521 ft	Computed	228.310 ft	3
	46	<input checked="" type="checkbox"/>	5.09600 ft							152.690 ft	3
	22		<input checked="" type="checkbox"/>	7.07600 ft	-1.98000 ft	14.536 ft	0.00550 ft	14.541 ft	Computed	155.840 ft	BM106 3

**Run - 3 (N3) Reduced Observations**

Observation	Status	Raw Δ Elevation	Correction	Final Δ Elevation	Setups	Length	Σ BS Readings	Σ FS Readings	Std. Error
<a href="#">22-22 (E4)</a>	Enabled	-0.00400 ft	0.00400 ft	0.00000 ft	18	7917.630 ft	81.50600 ft	81.51000 ft	0.04896 ft

**Run - 4 Raw Observations**

**Raw Misclosure:** -0.00200 ft  
**Σ BS Distances:** 6979.380 ft  
**Σ FS Distances:** 6968.100 ft  
**Run Length:** 13947.480 ft  
**Reduction:** Adjusted Values

Create	Point ID	BS	IS	FS	Δ Elevation	Raw Elevation	Correction	Adj. Elevation	Type	Distance	Description	
<input checked="" type="checkbox"/>	14	<input checked="" type="checkbox"/>			0.00000 ft	18.050 ft	0.00000 ft	18.050 ft 	Benchmark	207.180 ft	FEB4 3	
<input type="checkbox"/>	50			<input checked="" type="checkbox"/>	5.54300 ft	-3.03300 ft	15.017 ft	0.00006 ft	15.017 ft	Computed	213.880 ft	TP 3
	50										TP 3	

		✓ 5.31500 ft								164.210 ft	
<input type="checkbox"/>	51		✓ 5.09700 ft	0.21800 ft	15.235 ft	0.00010 ft	15.235 ft	Computed		165.060 ft	TP 3
	51	✓ 5.94000 ft								231.820 ft	TP 3
<input type="checkbox"/>	52		✓ 8.27800 ft	-2.33800 ft	12.897 ft	0.00018 ft	12.897 ft	Computed		235.140 ft	TP 3
	52	✓ 5.48900 ft								203.020 ft	TP 3
<input type="checkbox"/>	53		✓ 4.89100 ft	0.59800 ft	13.495 ft	0.00024 ft	13.495 ft	Computed		198.460 ft	TP 3
	53	✓ 4.76700 ft								203.080 ft	TP 3
<input type="checkbox"/>	54		<input type="checkbox"/> 8.09200 ft	-3.58500 ft	9.910 ft	0.00030 ft	9.910 ft	Computed		180.640 ft	##### 3
	54		✓ 8.35200 ft							203.350 ft	TP 3
	54	✓ 5.25200 ft								197.740 ft	TP 3
<input type="checkbox"/>	55		✓ 5.16700 ft	0.08500 ft	9.995 ft	0.00036 ft	9.995 ft	Computed		204.660 ft	TP 3
	55	✓ 4.27700 ft								195.700 ft	TP 3
<input type="checkbox"/>	56		✓ 4.67200 ft	-0.39500 ft	9.600 ft	0.00042 ft	9.600 ft	Computed		199.440 ft	TP 3
	56	✓ 4.37100 ft								198.460 ft	TP 3
<input type="checkbox"/>	57		✓ 4.30900 ft	0.06200 ft	9.662 ft	0.00048 ft	9.662 ft	Computed		197.150 ft	TP 3
	57	✓ 4.28300 ft								195.180 ft	TP 3
<input type="checkbox"/>	58		✓ 5.29300 ft	-1.01000 ft	8.652 ft	0.00053 ft	8.653 ft	Computed		198.490 ft	TP 3
	58	✓ 4.86400 ft								199.840 ft	TP 3
<input type="checkbox"/>	59		✓ 4.56600 ft	0.29800 ft	8.950 ft	0.00059 ft	8.951 ft	Computed		204.890 ft	TP 3
	59	✓ 8.48200 ft								147.800 ft	TP 3
<input type="checkbox"/>	60		✓ 5.54100 ft	2.94100 ft	11.891 ft	0.00062 ft	11.892 ft	Computed		135.010 ft	TP 3
	60	✓ 4.35900 ft								200.430 ft	TP 3
<input type="checkbox"/>	61		✓ 4.48900 ft	-0.13000 ft	11.761 ft	0.00068 ft	11.762 ft	Computed		211.880 ft	TP 3
	61	✓ 5.10200 ft								204.720 ft	TP 3
<input type="checkbox"/>	62			-0.65300 ft	11.108 ft	0.00074 ft	11.109 ft	Computed		203.210 ft	TP 3




			✓ 5.75500 ft									
	62	✓ 4.81100 ft									195.670 ft	TP 3
<input type="checkbox"/>	63		✓ 4.95900 ft	-0.14800 ft	10.960 ft	0.00080 ft	10.961 ft	Computed			197.050 ft	TP 3
	63	✓ 4.78900 ft									195.870 ft	TP 3
<input type="checkbox"/>	64		✓ 4.64000 ft	0.14900 ft	11.109 ft	0.00086 ft	11.110 ft	Computed			195.500 ft	TP 3
	64	✓ 5.06800 ft									198.620 ft	TP 3
<input type="checkbox"/>	65		✓ 5.65600 ft	-0.58800 ft	10.521 ft	0.00092 ft	10.522 ft	Computed			201.410 ft	TP 3
	65	✓ 5.25200 ft									199.930 ft	TP 3
<input type="checkbox"/>	66		✓ 5.07100 ft	0.18100 ft	10.702 ft	0.00097 ft	10.703 ft	Computed			193.860 ft	TP 3
	66	✓ 5.31400 ft									139.830 ft	TP 3
<input type="checkbox"/>	67		✓ 4.60600 ft	0.70800 ft	11.410 ft	0.00100 ft	11.411 ft	Computed			136.810 ft	PMW1 3
	67	✓ 4.61100 ft									136.880 ft	PMW1 3
<input type="checkbox"/>	68		✓ 5.35900 ft	-0.74800 ft	10.662 ft	0.00103 ft	10.663 ft	Computed			139.800 ft	TP 3
	68	✓ 5.09700 ft									194.290 ft	TP 3
<input type="checkbox"/>	69		✓ 5.21700 ft	-0.12000 ft	10.542 ft	0.00108 ft	10.543 ft	Computed			199.610 ft	TP 3
	69	✓ 5.71500 ft									202.160 ft	TP 3
<input type="checkbox"/>	70		✓ 5.12500 ft	0.59000 ft	11.132 ft	0.00114 ft	11.133 ft	Computed			197.830 ft	TP 3
	70	✓ 4.88200 ft									195.280 ft	TP 3
<input type="checkbox"/>	71		✓ 4.98400 ft	-0.10200 ft	11.030 ft	0.00120 ft	11.031 ft	Computed			195.770 ft	TP 3
	71	✓ 5.10100 ft									197.010 ft	TP 3
<input type="checkbox"/>	72		✓ 5.01300 ft	0.08800 ft	11.118 ft	0.00126 ft	11.119 ft	Computed			195.600 ft	TP 3
	72	✓ 5.78500 ft									203.900 ft	TP 3
<input type="checkbox"/>	73		✓ 5.10600 ft	0.67900 ft	11.797 ft	0.00132 ft	11.798 ft	Computed			203.250 ft	TP 3
	73	✓ 4.63900 ft									213.060 ft	TP 3
<input type="checkbox"/>	74			0.12600 ft	11.923 ft	0.00138 ft	11.924 ft	Computed			200.130 ft	TP 3

			✓ 4.51300 ft								
	74	✓ 5.38600 ft								135.070 ft	TP 3
<input type="checkbox"/>	75		✓ 8.36300 ft	-2.97700 ft	8.946 ft	0.00141 ft	8.947 ft	Computed		147.600 ft	TP 3
	75	✓ 4.74700 ft								206.690 ft	TP 3
<input type="checkbox"/>	76		✓ 5.02500 ft	-0.27800 ft	8.668 ft	0.00147 ft	8.669 ft	Computed		199.110 ft	TP 3
	76	✓ 5.42000 ft								197.180 ft	TP 3
<input type="checkbox"/>	77		✓ 4.39700 ft	1.02300 ft	9.691 ft	0.00152 ft	9.693 ft	Computed		196.100 ft	TP 3
	77	✓ 4.42800 ft								197.010 ft	TP 3
<input type="checkbox"/>	78		✓ 4.50200 ft	-0.07400 ft	9.617 ft	0.00158 ft	9.619 ft	Computed		198.520 ft	TP 3
	78	✓ 4.79000 ft								199.930 ft	TP 3
<input type="checkbox"/>	79		✓ 4.40500 ft	0.38500 ft	10.002 ft	0.00164 ft	10.004 ft	Computed		194.880 ft	TP 3
	79	✓ 5.27900 ft								204.530 ft	TP 3
<input type="checkbox"/>	80		✓ 5.39000 ft	-0.11100 ft	9.891 ft	0.00170 ft	9.893 ft	Computed		197.600 ft	TP 3
	80	✓ 8.49600 ft								203.150 ft	TP 3
<input type="checkbox"/>	81		✓ 4.89200 ft	3.60400 ft	13.495 ft	0.00176 ft	13.497 ft	Computed		203.120 ft	TP 3
	81	✓ 4.61300 ft								198.360 ft	TP 3
<input type="checkbox"/>	82		✓ 5.19400 ft	-0.58100 ft	12.914 ft	0.00182 ft	12.916 ft	Computed		201.900 ft	TP 3
	82	✓ 8.26900 ft								236.350 ft	TP 3
<input type="checkbox"/>	83		✓ 5.95600 ft	2.31300 ft	15.227 ft	0.00190 ft	15.229 ft	Computed		231.460 ft	TP 3
	83	✓ 5.34300 ft								164.700 ft	TP 3
<input type="checkbox"/>	84		✓ 5.47700 ft	-0.13400 ft	15.093 ft	0.00194 ft	15.095 ft	Computed		164.070 ft	TP 3
	84	✓ 5.54100 ft								214.730 ft	TP 3
✓	85		✓ 2.58600 ft	2.95500 ft	18.048 ft	0.00200 ft	18.050 ft	Benchmark		206.500 ft	FEB4 3


**Run - 4 (N4) Reduced Observations**

Observation	Status		Correction		Setups	Length			
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		Raw $\Delta$ Elevation		Final $\Delta$ Elevation			$\Sigma$ BS Readings	$\Sigma$ FS Readings	Std. Error
 <a href="#">14-85</a> <a href="#">(E5)</a>	Enabled	-0.00200 ft	0.00200 ft	0.00000 ft	36	13947.480 ft	188.38700 ft	188.38900 ft	0.06105 ft

**Run - 4 (N4) Reduced Coordinates**

Point ID	Status	Elevation
 <a href="#">85</a>	Enabled	18.05000 ft

Date: 1/14/2015 3:12:07 PM	Project:	Trimble Business Center
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