Survey Report

Job name	PN-06-09-2025-SW-01
Creation date	6 Sep 2025
Version	Trimble Access 25.10
Distance Units	Meters
Angle units	Degrees
Pressure Units	mbar
Temperature Units	Celsius

Coordinate system (Job)

System	World wide/UTM
Zone	43 North
Datum	WGS 1984

Projection

Projection	Universal Transverse Mercator
Origin lat	0°00'00.00000"N
Origin long	75°00'00.00000"E
False northing	0.000
False easting	500000.000
Scale	0.99960000
South azimuth (grid)	No
Grid coords	Increase North-East
Ellipsoid	Semi-major axis: 6378137.000 Flattening: 298.25722356

Local site

Type	Grid

Datum transformation

Type	Seven parameter
Semi-major axis	6378137.000
Flattening	298.257223
Rotation X	0°00'00.0000"
Rotation Y	0°00'00.0000"
Rotation Z	0°00'00.0000"
Translation X	0.000
Translation Y	0.000
Translation Z	0.000
Scale	0.00000ppm

Vertical adjustment

Geoid file	EGM96 (Global)

Collected Field Data (ECEF deltas: APC to APC)

Corrections

South azimuth (grid)	No
Grid coords	Increase North-East
Magnetic declination	0°00'00"
Distances	Ground
Neighborhood adjustment	Off

Datum transformation

Type	Seven parameter
Semi-major axis	6378137.000
Flattening	298.257223
Rotation X	0°00'00.0000"
Rotation Y	0°00'00.0000"
Rotation Z	0°00'00.0000"
Translation X	0.000
Translation Y	0.000
Translation Z	0.000
Scale	0.00000ppm

Projection

Projection	Universal Transverse Mercator
Origin lat	0°00'00.00000"N
Origin long	75°00'00.00000"E
False northing	0.000
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Scale	0.99960000
Ellipsoid	Semi-major axis: 6378137.000 Flattening: 298.25722356

Local site

Type	Grid

Vertical adjustment

Geoid file	EGM96 (Global)

Coordinate system

System	World wide/UTM
Zone	43 North
Datum	WGS 1984

Rover options

Elevation mask	10	PDOP mask	6					

Base options

Elevation mask	10	PDOP mask	6					

Rover options

Elevation mask	10	PDOP mask	6					

Survey event

Survey event	Rover started

Point (Global)	RS_WARD	Latitude	19°12'13.83947"N	Longitude	72°50'43.41498"E	Height	-42.722	Code	BS

GNSS receiver

Receiver type	Unknown
Serial number	

Firmware version	0
Antenna type	R12 Internal
Measurement method	Antenna Phase Center
Tape adjustment	0.000
Horizontal offset	0.000
Vertical offset	0.000

Base point

Point	RS_WARD	Antenna height	1.725	Type	Corrected				

Initialization event: RTK initialized

GPS week	2382	Seconds	543332	Initialization type	On the fly	Survey type	Real-time		

GNSS receiver

Receiver type	R12i
Serial number	6405710282
Firmware version	6.25
Antenna type	R12i Internal
Measurement method	Bottom of quick release
Tape adjustment	0.000
Horizontal offset	0.000
Vertical offset	0.179

Point	1	ΔX	2683.275	ΔY	-248.882	ΔZ	-1654.558	Code	PN
		Method	RTK	Type	Topo point	Search class	Normal		
Antenna height	2.000	Type	Uncorrected	Hz Prec (DRMS)	0.018	Vt Prec (1 sigma)	0.029		
QC 1		PDOP	1.9	GDOP	3.3	HDOP	0.9	VDOP	1.6
		Base data age	2	Satellites	25	Positions used	3		
QC 2		VCV xx (m²)	0.000155	VCV xy (m²)	-0.000070	VCV xz (m²)	0.000010		
				VCV yy (m²)	0.000788	VCV yz (m²)	0.000315		
						VCV zz (m²)	0.000216		

Warnings (1)	Poor precision

Initialization event: RTK not initialized

GPS week	2382	Seconds	543383	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK initialized

GPS week	2382	Seconds	543404	Initialization type	On the fly	Survey type	Real-time		

Point	2	ΔX	2687.981	ΔY	-239.454	ΔZ	-1684.103	Code	PN-NOT-OPEN
		Method	RTK	Type	Topo point	Search class	Normal		
Antenna height	2.000	Type	Uncorrected	Hz Prec (DRMS)	0.049	Vt Prec (1 sigma)	0.074		
QC 1		PDOP	1.7	GDOP	3.0	HDOP	0.8	VDOP	1.5

		Base data age	3	Satellites	23	Positions used	0		
QC 2		VCV xx (m²)	0.002262	VCV xy (m²)	0.000751	VCV xz (m²)	0.000823		
				VCV yy (m²)	0.004409	VCV yz (m²)	0.001837		
						VCV zz (m²)	0.001216		

Warnings (2)	Poor precision
Conditions at storage (2)	Poor precision

Initialization event: RTK not initialized

GPS week	2382	Seconds	543560	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK initialized

GPS week	2382	Seconds	543560	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK not initialized

GPS week	2382	Seconds	543607	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK initialized

GPS week	2382	Seconds	543608	Initialization type	On the fly	Survey type	Real-time		

Point	3	ΔX	2691.901	ΔY	-229.648	ΔZ	-1713.839	Code	PN
		Method	RTK	Type	Topo point	Search class	Normal		
Antenna height	2.000	Type	Uncorrected	Hz Prec (DRMS)	0.043	Vt Prec (1 sigma)	0.085		
QC 1		PDOP	1.3	GDOP	2.4	HDOP	0.6	VDOP	1.1
		Base data age	1	Satellites	30	Positions used	0		
QC 2		VCV xx (m²)	0.001638	VCV xy (m²)	0.001320	VCV xz (m²)	0.000443		
				VCV yy (m²)	0.005355	VCV yz (m²)	0.002865		
						VCV zz (m²)	0.002013		

Warnings (3)	Poor precision
Conditions at storage (3)	Poor precision

Initialization event: RTK not initialized

GPS week	2382	Seconds	543893	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK initialized

GPS week	2382	Seconds	543907	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK not initialized

GPS week	2382	Seconds	543982	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK initialized

GPS week	2382	Seconds	544033	Initialization type	On the fly	Survey type	Real-time		

Point	4	ΔX	2663.753	ΔY	-220.647	ΔZ	-1715.054	Code	PN-FLOT
		Method	RTK	Type	Topo point	Search class	Normal		
Antenna height	2.000	Type	Uncorrected	Hz Prec (DRMS)	0.097	Vt Prec (1 sigma)	0.155		
QC 1		PDOP	1.5	GDOP	3.1	HDOP	0.7	VDOP	1.3
		Base data age	3	Satellites	26	Positions used	0		
QC 2		VCV xx (m²)	0.002893	VCV xy (m²)	-0.002792	VCV xz (m²)	-0.000122		
				VCV yy (m²)	0.023578	VCV yz (m²)	0.008895		
						VCV zz (m²)	0.006916		

Warnings (4)	Excess movement	Poor precision
Conditions at storage (4)	Excess movement	Poor precision

Initialization event: RTK not initialized

GPS week	2382	Seconds	544118	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK initialized

GPS week	2382	Seconds	544177	Initialization type	On the fly	Survey type	Real-time		

Point	5	ΔX	2569.650	ΔY	-190.805	ΔZ	-1717.079	Code	PN
		Method	RTK	Type	Topo point	Search class	Normal		
Antenna height	2.000	Type	Uncorrected	Hz Prec (DRMS)	0.047	Vt Prec (1 sigma)	0.077		
QC 1		PDOP	1.1	GDOP	2.1	HDOP	0.5	VDOP	1.0
		Base data age	3	Satellites	31	Positions used	0		
QC 2		VCV xx (m²)	0.001936	VCV xy (m²)	0.001068	VCV xz (m²)	0.000690		
				VCV yy (m²)	0.004748	VCV yz (m²)	0.001895		
						VCV zz (m²)	0.001507		

Warnings (5)	Poor precision
Conditions at storage (5)	Poor precision

Initialization event: RTK not initialized

GPS week	2382	Seconds	544430	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK initialized

GPS week	2382	Seconds	544465	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK not initialized

GPS week	2382	Seconds	544469	Initialization type	On the fly	Survey type	Real-time		

Point	6	X	1779753.675	Y	5757112.553	Z	2082970.243	Code	PN-FLOT
		Method	Code	Type	Topo point	Search class	Normal		
Antenna height	2.000	Type	Uncorrected	Hz Prec (DRMS)	1.192	Vt Prec (1 sigma)	1.592		
QC 1		PDOP	1.9	GDOP	2.3	HDOP	1.1	VDOP	1.5
		Base data age	1	Satellites	16	Positions used	0		
QC 2		VCV xx (m²)	1.043906	VCV xy (m²)	0.256875	VCV xz (m²)	0.246642		
				VCV yy (m²)	2.561954	VCV yz (m²)	0.263829		
						VCV zz (m²)	0.351243		

Warnings (6)	Poor precision
Conditions at storage (6)	Poor precision

Initialization event: RTK initialized

GPS week	2382	Seconds	544693	Initialization type	On the fly	Survey type	Real-time		

Point	7	ΔX	2561.687	ΔY	-209.229	ΔZ	-1659.549	Code	PN-FLOT
		Method	RTK	Type	Topo point	Search class	Normal		
Antenna height	2.000	Type	Uncorrected	Hz Prec (DRMS)	0.053	Vt Prec (1 sigma)	0.128		
QC 1		PDOP	1.4	GDOP	2.4	HDOP	0.6	VDOP	1.3
		Base data age	2	Satellites	26	Positions used	0		
QC 2		VCV xx (m²)	0.006649	VCV xy (m²)	0.008043	VCV xz (m²)	0.002956		
				VCV yy (m²)	0.010651	VCV yz (m²)	0.003949		
						VCV zz (m²)	0.001790		

Warnings (7)	Poor precision
Conditions at storage (7)	Poor precision

Initialization event: RTK not initialized

GPS week	2382	Seconds	544929	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK initialized

GPS week	2382	Seconds	544941	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK not initialized

GPS week	2382	Seconds	545194	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK initialized

GPS week	2382	Seconds	545214	Initialization type	On the fly	Survey type	Real-time		

Point	8	ΔX	2556.714	ΔY	-220.165	ΔZ	-1624.935	Code		PN-FLOT
		Method	RTK	Type	Topo point	Search class	Normal			
Antenna height	2.000	Type	Uncorrected	Hz Prec (DRMS)	0.080	Vt Prec (1 sigma)	0.132			
QC 1		PDOP	1.3	GDOP	2.4	HDOP	0.6	VDOP		1.1
		Base data age	4	Satellites	26	Positions used	0			
QC 2		VCV xx (m²)	0.005152	VCV xy (m²)	0.002743	VCV xz (m²)	0.002659			
				VCV yy (m²)	0.011941	VCV yz (m²)	0.007775			
						VCV zz (m²)	0.006588			

Warnings (8)	Poor precision
Conditions at storage (8)	Poor precision

Initialization event: RTK not initialized

GPS week	2382	Seconds	545383	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK initialized

GPS week	2382	Seconds	545384	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK not initialized

GPS week	2382	Seconds	545429	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK initialized

GPS week	2382	Seconds	545477	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK not initialized

GPS week	2382	Seconds	545908	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK initialized

GPS week	2382	Seconds	546081	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK not initialized

GPS week	2382	Seconds	546122	Initialization type	On the fly	Survey type	Real-time		

Initialization event: RTK initialized

GPS week	2382	Seconds	547111	Initialization type	On the fly	Survey type	Real-time		

Survey event

Survey event	End survey

Reduced points

Point	RS_WARD	North		East		Elevation		Code	
Point	RS_WARD	North	2124784.151	East	273463.294	Elevation	25.005	Code	BS
Point	1	North	2123071.883	East	270803.937	Elevation	3.871	Code	PN
Point	2	North	2123040.578	East	270801.833	Elevation	3.981	Code	PN-NOT-OPEN
Point	3	North	2123009.039	East	270800.590	Elevation	4.151	Code	PN
Point	4	North	2123007.428	East	270830.130	Elevation	4.022	Code	PN-FLOT
Point	5	North	2123004.045	East	270928.840	Elevation	4.038	Code	PN
Point	6	North	2123034.621	East	270931.086	Elevation	6.154	Code	PN-FLOT
Point	7	North	2123064.921	East	270931.768	Elevation	4.098	Code	PN-FLOT
Point	8	North	2123101.516	East	270933.747	Elevation	4.219	Code	PN-FLOT