Tribhuwan University
Institute of Engineering
Central Campus, Pulchowk
Department of Civil Engineering
Survey Instruction Committee

Gale's Table: Minor Traverse

Ctation	Leg	Distance	Observed Angles	WCB	Computed WCB	Correction	Corrected	Consecutive Coordinate		Independent Coordinate		Correction		Corrected Independent		Adjusted	Adjusted
Station							WCB	Latitude	Departure	Northing	Easting	Latitude	Departure	Latitude	Departure	length	Bearing
M16	M17			209°53'00''						3063242.544	626911.556			3063242.544	626911.556		
M17	m10	38.516	98°04'53''		127°57'53"	00'10"	127°57'43"	-23.693	30.367	3063218.851	626941.923	-0.008	-0.004	3063218.843	626941.919	38.518	127°58'31''
m10	m9	72.356	147°21'56"		95°19'49''	00'19"	95°19'30''	-6.715	72.044	3063212.136	627013.967	-0.024	-0.011	3063212.113	627013.956	72.350	95°20'14''
m9	m8	86.435	103°52'23"		19°12'12''	00'29"	19°11'43''	81.629	28.419	3063293.765	627042.385	-0.042	-0.019	3063293.724	627042.366	86.414	19°11'38''
m8	m7	56.267	303°57'27"		143°09'39"	00'38''	143°09'01''	-45.025	33.744	3063248.740	627076.130	-0.054	-0.024	3063248.686	627076.105	56.273	143°09'44''
m7	m6	34.634	137°47'37"		100°57'16''	00'48''	100°56'28"	-6.574	34.004	3063242.167	627110.134	-0.061	-0.028	3063242.105	627110.106	34.632	100°57'16''
m6	m5	34.567	249°28'01"		170°25'17''	00'58''	170°24'19''	-34.083	5.761	3063208.084	627115.896	-0.069	-0.031	3063208.015	627115.864	34.573	170°24'46''
m5	m4	69.065	105°43'17"		96°08'34''	01'07''	96°07'27''	-7.368	68.671	3063200.715	627184.567	-0.083	-0.038	3063200.632	627184.529	69.060	96°08'13''
m4	m3	61.177	161°59'33"		78°08'07''	01'17''	78°06'50''	12.600	59.865	3063213.316	627244.431	-0.096	-0.044	3063213.219	627244.388	61.168	78°07'30''
m3	m2	39.651	64°28'07''		322°36'14"	01'26''	322°34'48''	31.490	-24.094	3063244.806	627220.338	-0.105	-0.048	3063244.701	627220.290	39.646	322°34'03''
m2	m1	73.331	235°41'21"		18°17'35''	01'36''	18°15'59''	69.636	22.985	3063314.442	627243.322	-0.120	-0.055	3063314.322	627243.267	73.314	18°15'52''
m1	M14	77.146	76°38'36''		274°56'11''	01'45''	274°54'26''	6.599	-76.863	3063321.041	627166.459	-0.137	-0.062	3063320.904	627166.397	77.152	274°53'38''
M14	M15		191°25'02"	286°19'18''	286°21'13"	01'55"			Original M14	3063320.904	627166.397						
Σ		643.143			00°01'55"			78.497	254.903	0.137	0.062					643.102	

 $e = \sqrt{\Delta L^2 + \Delta D^2} = 36'16''$

Relative Precision = e/P = 2.3E-04