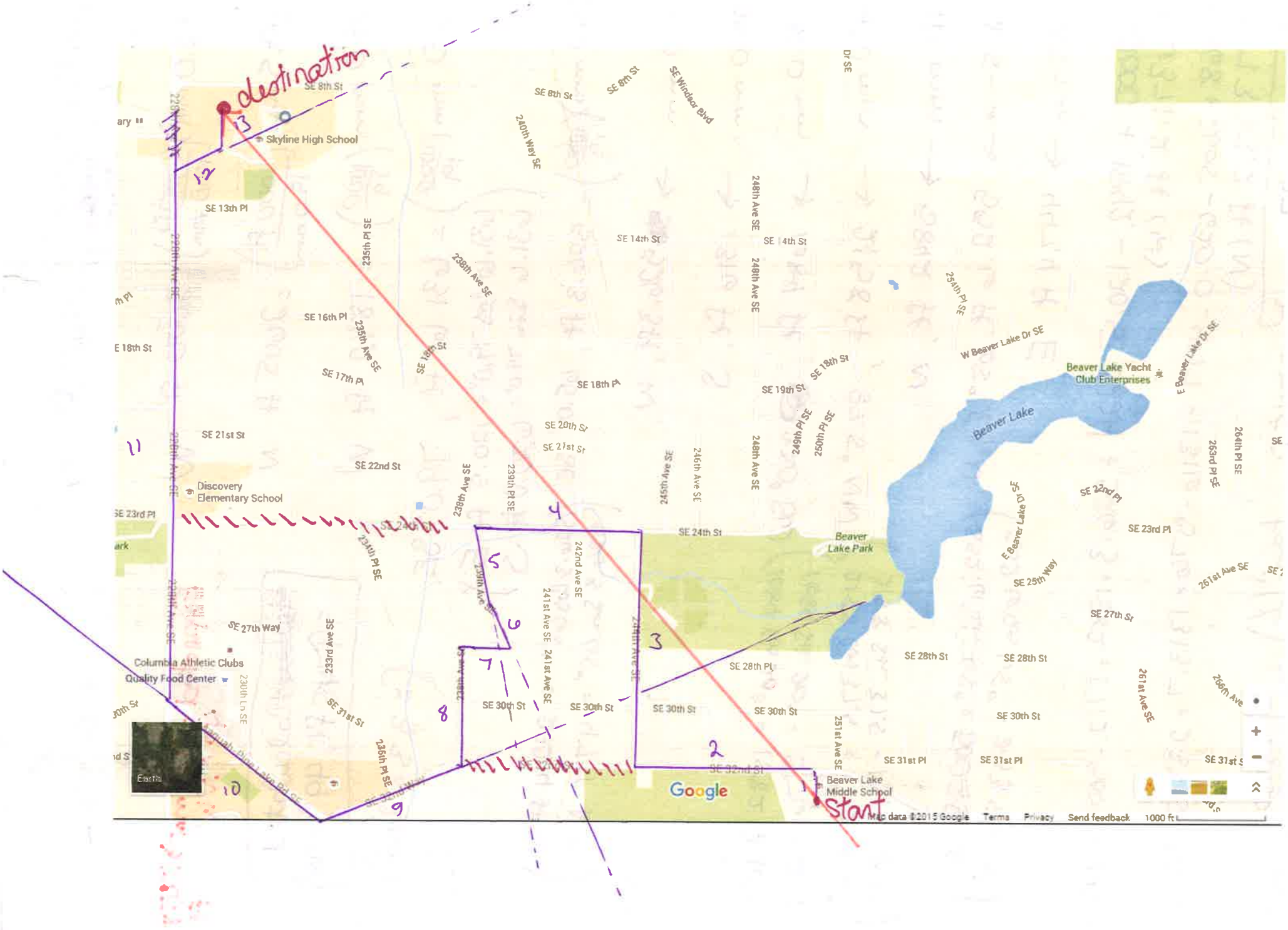
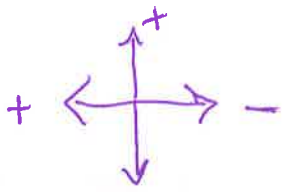

destination
Skyline High School
SE 8th St
SE 13th Pl
SE 14th St
SE 16th Pl
SE 17th Pl
SE 18th Pl
SE 18th St
SE 19th St
SE 20th St
SE 21st St
SE 22nd St
SE 23rd Pl
SE 24th St
SE 25th Way
SE 27th St
SE 27th Way
SE 28th Pl
SE 28th St
SE 30th St
SE 31st Pl
SE 31st St
SE Windsor Blvd
240th Way SE
248th Ave SE
235th Pl SE
238th Ave SE
235th Ave SE
230th Ave SE
234th Pl SE
239th Pl SE
242nd Ave SE
241st Ave SE
245th Ave SE
246th Ave SE
249th Pl SE
250th Pl SE
254th Pl SE
W Beaver Lake Dr SE
E Beaver Lake Dr SE
Beaver Lake
Beaver Lake Yacht Club Enterprises
Beaver Lake Park
Discovery Elementary School
Columbia Athletic Clubs
Quality Food Center
Beaver Lake Middle School
Start
Google
Map data ©2015 Google
Terms
Privacy
Send feedback
1000 ft

(1) $(70\ mm)\left(\frac{1000\ ft}{19.0\ mm}\right) = 3684\ ft.\ N$



(2) $(38.0\ mm)\left(\frac{1000\ ft}{19.0\ mm}\right) = 2000\ ft\ W$

Expected = 191.5 mm → 10078 ft
49° NW

(3) $49.5\ mm\left(\frac{1000\ ft}{19.0\ mm}\right) = 2605\ ft\ N$

~~Measured~~ Calculated
= 9745 ft, 49° NW

(4) $35.0\ mm\left(\frac{1000}{19}\right) = 1842\ ft\ W$

(≈ 3.3% low)

(5) $12.0\ mm\left(\frac{1000}{19}\right) = 631.6\ ft$, 79.0° SE

$(631.6 \cos 79.0° = 120.5\ ft\ E)$
$(631.6 \sin 79.0° = 620.0\ ft\ S)$

(6) $(10.0\ mm)\left(\frac{1000}{19}\right) = 526.3\ ft$, 65.0° SE $(526.3 \cos 65° = 222.4\ ft\ E)$ $(526.3 \sin 65° = 477\ ft\ S)$

(7) 10.0 mm → 526.3 ft, W

(8) 25.0 mm → 1316 ft, S

(9) 32.0 mm → 1684 ft, 20.0° SW $(1684 \cos 20° = 1582\ ft\ W)$ $(1684 \sin 20° = 576\ ft\ S)$

(10) 41.0 mm → 2158 ft, 37.5° NW $(2158 \cos 37.5 = 1712\ ft\ W)$ $(2158 \sin 37.5 = 1313.7\ ft\ N)$

(11) 111 mm → 5842 ft, N

(12) 10.5 mm → 552.6 ft, 65° E of N $(552.6 \sin 65° = 500.8\ ft\ E)$ $(552.6 \cos 65° = 233.5\ ft\ N)$

(13) 8.5 mm → 447.4 ft E

$\Sigma X = 2000 + 1842 - 120.5 - 222.4 + 526.3 + 1582 + 1712 - 500.8 - 447.4$
$= 6371.2\ ft\ (W)$

$\Sigma Y = 368 + 2605 - 620.0 - 477 - 1316 - 576 + 1313.7 + 233.5 + 5842$
$= 7373.2\ ft\ (N)$

$\vec{S} = \sqrt{6371.2^2 + 7373.2^2} = 9745\ ft$ $\quad \tan^{-1}\left(\frac{Y}{X}\right) = \tan^{-1}\left(\frac{7373.2}{6371.2}\right) = 49°$