

| $F_f(N)$ | $W_{total}(J/m)$ | $W_j(J)$ | $W_f(J)$ | $L_s(m)$ |
|----------|------------------|----------|----------|----------|
| 0 | 31.567 | 14.363 | 0 | 0.455 |
| 11.44 | 23.563 | 10.707 | 2.30 | 0.552 |

TABLE I

WORK DONE BY THE JOINTS AND THE FOOT PER DISTANCE TRAVELLED. F_f , L_s ARE THE FOOT FORCE AND STEP LENGTH, W_{total} IS TOTAL WORK PER DISTANCE TRAVELLED, W_j , AND W_f ARE WORK BY JOINTS AND WORK BY FOOT, RESPECTIVELY, WHEN THE WALKING SPEED IS 0.95 M/S.

| Speed (m/s) | With Foot Force | | | | | Without Foot Force | | | | |
|----------------|-----------------|-----------------|--|--|--------------------|--------------------|-----------------|--|--|--------------------|
| | Cost (J/m) | δ_z - | $V_{zero}(\theta^-)$ (kgm ² /s) ² | V_{zero}^{max} (kgm ² /s) ² | Step Length (m) | Cost (J/m) | δ_z - | $V_{zero}(\theta^-)$ (kgm ² /s) ² | V_{zero}^{max} (kgm ² /s) ² | Step Length (m) |
| 0.95 | 23.563 | 0.92 | -126.21 | 415.07 | 0.552 | 31.567 | 0.85 | -202.92 | 255.66 | 0.455 |

TABLE II

OPTIMIZATION RESULTS WITH CONSTRAINED WALKING SPEED.