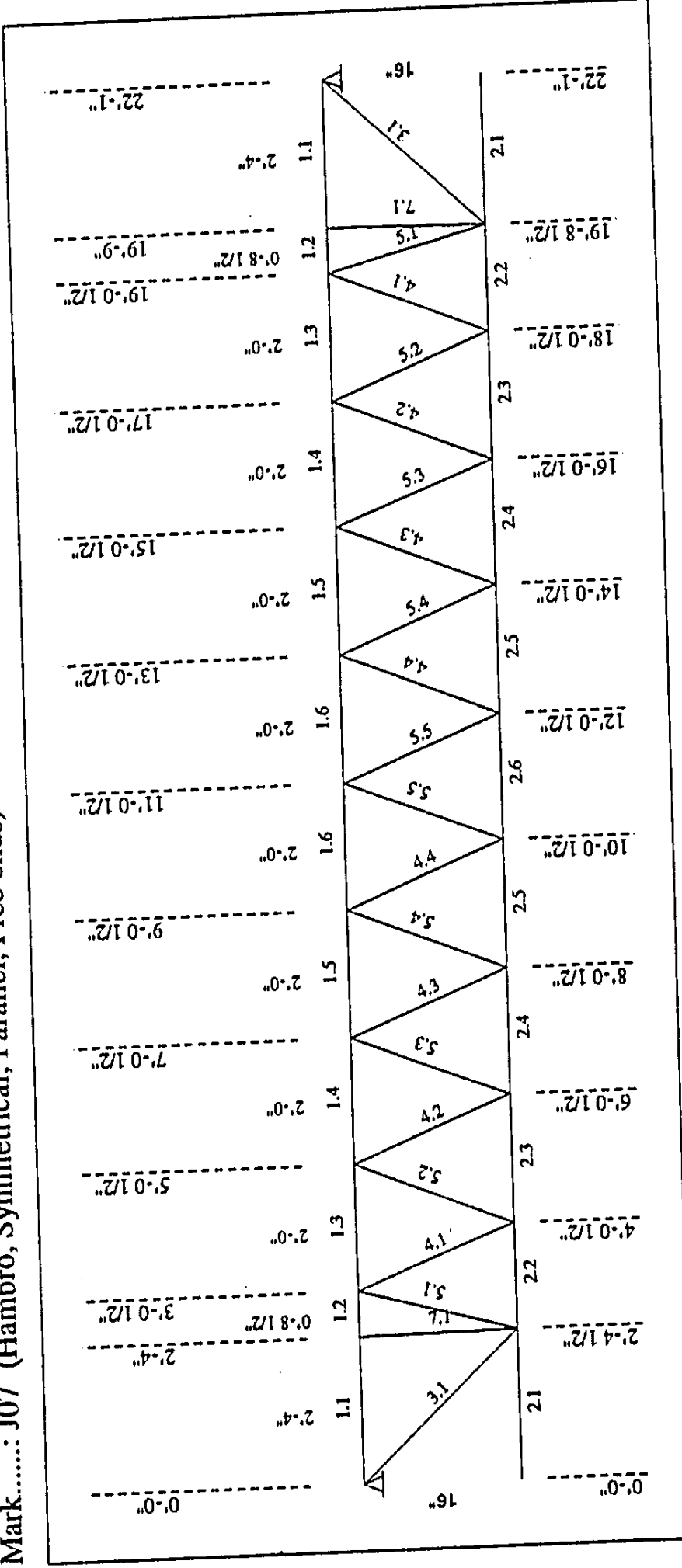




Mark: J07
Project: WEST MIAMI SIX MODEL B
01/24/05 17/07/20

Project: WEST MIAMI SIX MODEL B
JOIST CALCULATION ACCORDING TO HAMBRO SPECIFICATIONS

Mark: J07 (Hambro, Symmetrical, Parallel, Free ends)



LOADING CONDITIONS
(THE SHOWN VALUES ARE REAL)

TOTAL LOAD 430.50 lb/ft
105.00 lb/ft² x 4'-1 1/4" N16 LIVE LOAD ... 164.00 lb/ft² x 4'-1 1/4" 40.00 lb/ft² x 4'-1 1/4"

HAMBRO

Total Thickness of the Slab. 3.00 in
Perimeter of the Slab. N 80 in
Length of the Extension of the Slab. 145.00 lb/ft²
Concrete Density. 3.00 Ksi
Compression Resistance (F_c) 187.41 in⁴
Composite Inertia 478.87 in⁴
Composite Maximum Capacity 364.11 lb/in²
Non-Composite Maximum Capacity DL 41.24 PSF LL = 20.00 PSF
Non-Composite Loading. (Formula 2003) = 148.52 lb/in (0.295)
Horizontal Shear at the Interface. 0.075
Utilization of the Slab. N
Type of Hambro (presence of reinforcing)

DEFLECTION

Allowed deflection under live load 0.73 in (L/ 360)
Calculated deflection under service live load 0.71 in (L/ 1231)
NB: Hambro Deflection: Beam Formula 1.3 4th Composite Inertia - .15 * Steel Inertia
Joist Inertia 73.51 in⁴
Required camber 0.55 in