**LABOR COST EXAMPLE: PITHOUSE #558 (see Supplementary Figure 1)**

Recorded information:

ELONG = 1.30

EWIDE = 0.78

FACTOR = 0.0

IPAREA = 0.58

PBEAM = 2

PDBACK = 3.84

PDENTRY = 3.84

PDFRONT = 3.84

PDSIDE = 3.84

PLLENGTH = 4.04

PLTHICK = 1.0

PLWIDTH = 2.37

PROLONG = 4.04

PROWIDE = 2.37

SUPPNUM = 3

WFACTOR = 1.8

WWIDE = 5.0

ADOBE CALCULATIONS

**PERIMETER** =(PROLONG x 2) + (PROWIDE x 2) – EWIDE + (ELONG x 2)

(4.04 x 2) + (2.37 x 2) – 0.78 + (1.3 x 2) = 14.64

**WADOBE** = [(PERIMETER x WWIDE x 1.8) / 100] – FACTOR

[(14.64 x 5 x 1.8)/100] – 0 = 1.32

**RAREA** =[PROLONG + (WWIDE/50) ] x [PROWIDE + (WWIDE/50)]

[4.04 + (5/50)] x [2.37 + (5/50)] = 10.23

**RADOBE** = RAREA x .05

10.23 x .05 = 0.51

**FADOBE** =PLLENGTH x PLWIDTH x PLTHICK/100

4.04 x 2.37 x 1/ 100 = 0.10

**TOTADOBE** =WADOBE + RADOBE+ FADOBE

1.32 + 0.51 + 0.10 = 1.92

**MIXING** =TOTADOBE / .05

1.92/ .05 = 38.40

**DIGGING** = (PROLONG \* PROWIDE \* .30) / .52

(4.04 \* 2.37 \* .30) / .52 = 5.52

**ADOBELAB** = MIXING + DIGGING

38.49 + 5.52 = 44.01 person-hours

WOOD CALCULATIONS

**BIGWOOD** = (SUPPNUM + PBEAM) x 50

(3 + 2) x 50 = 250

**MIDWOOD** =[(PROLONG x PROWIDE) + 8] x 15

[(4.04 x 2.37) +8] x 15 = 263.62

**BACKPN** =PDBACK x PROLONG

3.84 x 4.04 = 15.51

**FRONTPN=** PDFRONT x (PROLONG – EWIDE)

3.84 x (4.04 – 0.78) = 12.52

**SIDEPN** =2 x PDSIDE x PROWIDE

2 x 3.84 x 2.37 = 18.20

**ENTRYPN** =2 x PDENTRY x ELONG

2 x 3.84 x 1.30 = 9.98

**TOTALPN** =BACKPN + FRONTPN + SIDEPN + ENTRYPN

15.51 + 12.52 + 18.20 + 9.98 = 56.21

**SMALLWOOD** = TOTALPN x 10

56.21 x 10 = 562.10

**CLOSING** = RAREA x 29

10.23 x 29 = 296.67

**IPWOOD** = IPAREA x 29

0.58 x 29 = 16.82

**WCLOSE** =PERIMETER x WFACTOR x 29

14.64 x 1.8 x 29 = 764.21

**TOTWOOD**= BIGWOOD + MIDWOOD + SMALLWOOD + CLOSING + IPWOOD **+** WCLOSE

250 +263.62 + 562.10 + 296.67 + 16.82 + 764.21 = 2153.42

**CUTTING** = TOTWOOD/ 50

2153.42/ 50 = 43.07

**TRANSPORT** = TOTWOOD / 96

2153.42/ 96 = 22.43

**WOODLAB** = CUTTING + TRANSPORT

43.07 + 22.43 = 65.50 person-hours

BUILDING CALCULATIONS

**WALLAREA** = PERIMETER x 1.8

14.64 x 1.8 = 26.35

**BUILD** = (RAREA+ WALLAREA+ IPAREA) x2.5

(10.23+ 26.35+ 0.58) x 2.5 = 92.90 person-hours

TOTAL AND RELATIVE COSTS

**TOTLAB** = WOODLAB + ADOBELAB + BUILD

65.50 + 44.01 + 92.90 = 202.41 person-hours

**RELCOST** = TOTLAB/ (PROLONG x PROWIDE)

202.41/ (4.04 x 2.37) = 21.04 person-hours/square meter