

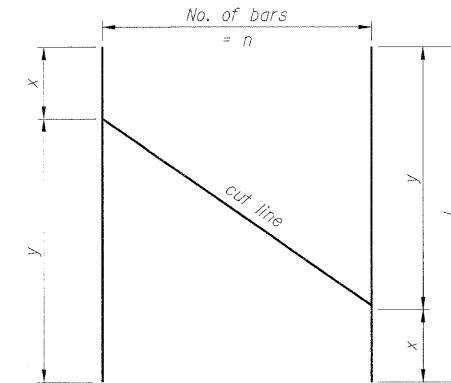
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOLDIER PILE DATA

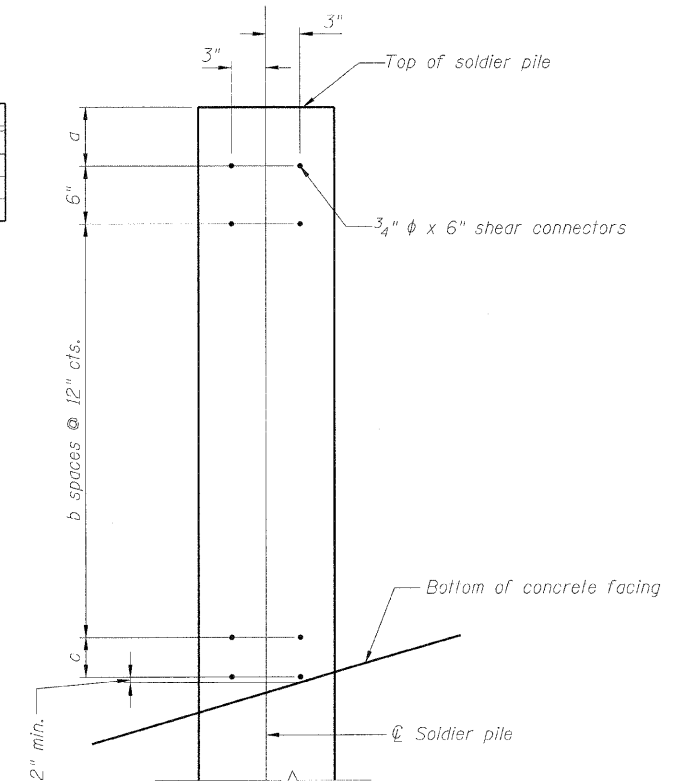
| Panel | Soldier Pile Designations | Top of soldier Pile Elevation | Bottom of soldier Pile Elevation | Top of concrete encasement | Top of CLSM | Stud Shearconnectors | | | |
|-------|---------------------------|-------------------------------|----------------------------------|----------------------------|-------------|----------------------|---|-----|--------------|
| | | | | | | a | b | c | No. per pile |
| A | A ₁ W24x117 | 463.95 | 428.23 | 462.24 | 463.20 | 3" | 1 | 0" | 6 |
| | A ₂ W24x117 | | | 459.44 | | | 2 | 3" | 10 |
| | A ₃ W24x117 | | | 455.44 | | | 7 | 3" | 20 |
| | A ₄ W24x117 | | | 455.10 | | | | | |
| B | B ₁ W24x117 | 463.13 | 427.41 | 455.48 | 462.38 | | 6 | 9" | 18 |
| | B ₂ W24x117 | | | 455.73 | | | 5 | 11" | 16 |
| | B ₃ W24x117 | | | 456.38 | | | 5 | 9" | 16 |
| | B ₄ W24x117 | | | 457.02 | | | 4 | 11" | 14 |
| | B ₅ W24x117 | | | 457.67 | | | 4 | 5" | 14 |
| | B ₆ W24x117 | | | 458.31 | | | 3 | 9" | 12 |
| C | C ₁ W24x117 | | | 459.02 | | | 3 | 0" | 10 |
| | C ₂ W24x117 | | | 459.98 | | | 2 | 0" | 8 |
| | C ₃ W24x117 | | | 460.57 | | | 1 | 7" | 8 |
| | C ₄ W24x117 | | | 461.34 | | | 1 | 9" | 8 |
| | C ₅ W24x117 | | | 462.12 | | | 0 | 3" | 6 |

BAR DIMENSIONS

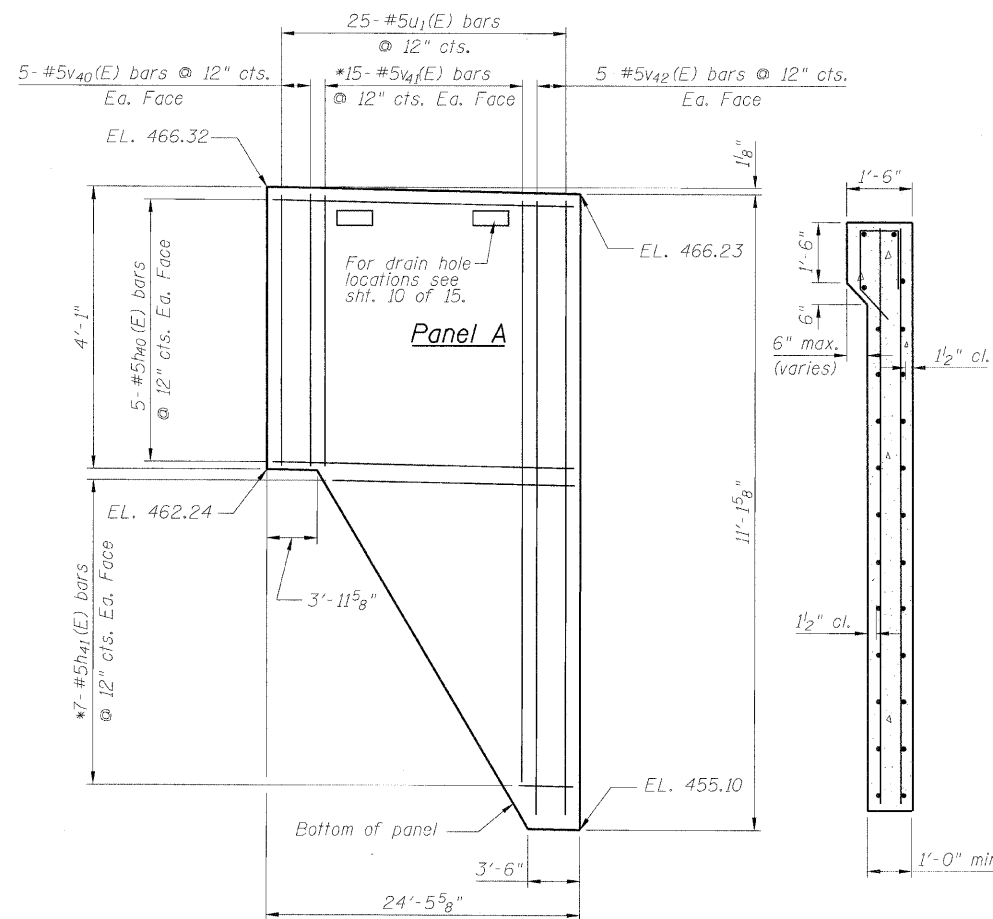
| Bar | n | x | y | l |
|---------------------|----|-------|--------|---------|
| v ₄₁ (E) | 15 | 4'-0" | 10'-6" | 14'-6" |
| v ₄₄ (E) | 51 | 3'-2" | 9'-8" | 12'-10" |
| h ₄₁ (E) | 7 | 3'-5" | 20'-7" | 24'-0" |
| h ₄₄ (E) | 8 | 4'-0" | 18'-0" | 22'-0" |



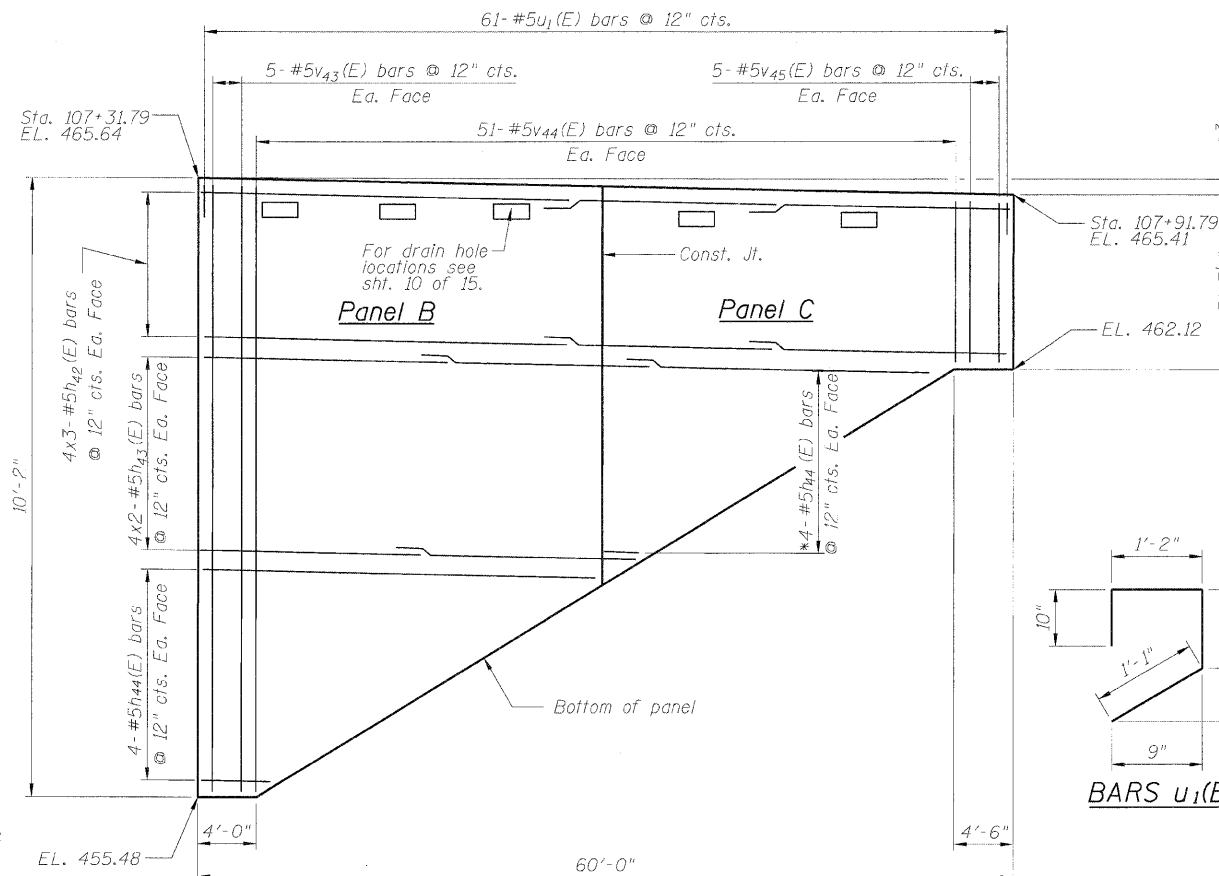
BAR CUTTING DIAGRAM



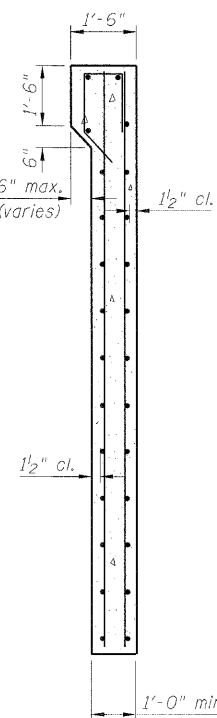
SHEAR STUD SPACING DETAIL



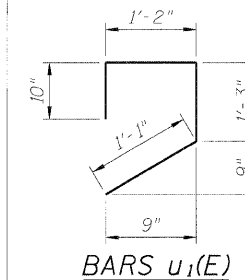
ELEVATION



SECTION THRU WALL



SECTION THRU PANEL



BARS u₁(E)

BILL OF MATERIAL

| Bar | No. | Size | Length | Shape |
|-----------------------------------|-----|------|---------|-------|
| h ₄₀ (E) | 10 | #5 | 24'-2" | — |
| h ₄₁ (E) | 7 | #5 | 24'-0" | — |
| h ₄₂ (E) | 24 | #5 | 21'-0" | — |
| h ₄₃ (E) | 16 | #5 | 20'-6" | — |
| h ₄₄ (E) | 8 | #5 | 22'-0" | — |
| v ₄₀ (E) | 10 | #5 | 3'-9" | — |
| v ₄₁ (E) | 15 | #5 | 14'-6" | — |
| v ₄₂ (E) | 10 | #5 | 10'-9" | — |
| v ₄₃ (E) | 10 | #5 | 9'-10" | — |
| v ₄₄ (E) | 51 | #5 | 12'-10" | — |
| v ₄₅ (E) | 10 | #5 | 3'-0" | — |
| u ₁ (E) | 86 | #5 | 4'-4" | U |
| Concrete Structures | | | Cu. Yd. | 22.8 |
| Reinforcement Bars (Epoxy coated) | | | Pound | 3070 |

SOLDIER PILE WALL DATA
STRUCTURE NO: 082-2044

| |
|----------------|
| DESIGNED - KRG |
| CHECKED - MJK |
| DRAWN - GSJ |
| CHECKED - MJK |

Min. bar laps
(unless noted otherwise)
5 bar = 1'-8"

* Order bars v₄₁(E), v₄₄(E) & h₄₄(E) bars full length cut as shown and use remainder in the opposite face.

MID-AMERICA ENGINEERING SERVICES

| | | | | | |
|---|-------------|------------------|--------------------|--------------|-----------|
| SHEET NO. 12 15 SHEETS | F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
| | 600 | 60-(30,31,128)-1 | St. Clair | 399 | 253 |
| STRUCTURE NO: 082-2044 | | | CONTRACT NO. 76830 | | |
| FED. ROAD DIST. NO. - ILLINOIS FED. AID PROJECT | | | | | |