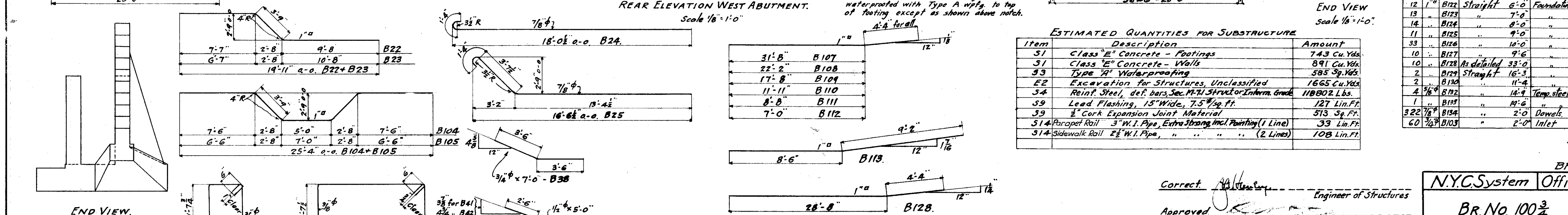


BILL OF BARS FOR BOTH ABUTS. AND COLS.

| No. | Size | Mark | Description | Location | WT. |
|-----|-------|------|--------------------|---------------|--------|
| 404 | 1" | B18 | Straight 5'-6" | Columns | 86.77 |
| 24 | 1/2" | B19 | " 2'-0" | " | 1.44 |
| 92 | 1" | B20 | " 2'-0" | " | 5.26 |
| 28 | " | B21 | " 19'-0" | " | 14.854 |
| 28 | " | B22 | As detailed 21'-0" | " | 19.99 |
| 28 | " | B23 | " 21'-0" | " | 14.680 |
| 378 | 1/8" | B24 | " 19'-0" | " | 47.21 |
| 126 | " | B25 | " 18'-4" | " | 4.721 |
| 420 | 1/4" | B26 | Straight 8'-6" | " | 23.85 |
| 404 | 1/4" | B27 | " 14'-6" | Vert. in Cols | 17.964 |
| 2 | 1/8" | B28 | " 35'-4" | Temp. steel | 7.4 |
| 24 | 1/4" | B29 | " 14'-6" | Vert. in Cols | 5.23 |
| 400 | 1/4" | B30 | As detailed 6'-7" | Ties for Cols | 9.90 |
| 130 | " | B31 | " 6'-7" | " | 3.22 |
| 120 | " | B32 | " 6'-9" | " | 3.08 |
| 124 | " | B33 | " 8'-5" | " | 3.93 |
| 24 | " | B34 | " 8'-7" | " | 7.7 |
| 52 | " | B35 | " 12'-4" | " | 2.41 |
| 8 | " | B36 | " 8'-7" | " | 2.6 |
| 208 | 3/16" | B37 | Straight 3'-4" | Dowels | 10.40 |
| 436 | " | B38 | As detailed 7'-0" | Back of Abut | 4.584 |
| 436 | " | B39 | Straight 12'-0" | " | 7.850 |
| 4 | 1/8" | B40 | " 39'-4" | Temp. steel | 1.64 |
| 90 | 1/4" | B41 | As detailed 5'-0" | Back of Wing | 3.01 |
| 88 | " | B42 | " 5'-0" | " | 2.94 |
| 30 | " | B43 | Straight 17'-0" | " | 3.41 |
| 37 | " | B44 | " 12'-6" | " | 3.09 |
| 30 | " | B45 | " 8'-0" | " | 1.8 |
| 24 | " | B46 | " 5'-0" | " | .80 |
| 57 | " | B47 | " 18'-0" | " | 6.85 |
| 1 | 1" | B109 | As detailed 22'-0" | Foundation | 14.10 |
| 1 | " | B110 | " 16'-3" | " | 8.3 |
| 1 | " | B111 | " 15'-0" | " | 4.21 |
| 1 | " | B112 | " 11'-4" | " | 3.6 |
| 18 | " | B113 | " 17'-8" | " | 3.3 |
| 2 | " | B114 | Straight 44'-0" | " | 1.25 |
| 6 | " | B115 | " 35'-0" | " | .60 |
| 2 | " | B116 | " 23'-0" | " | .23 |
| 2 | " | B117 | " 21'-0" | " | .86 |
| 23 | " | B118 | " 3'-0" | " | 7.4 |
| 8 | " | B119 | " 3'-6" | " | 4.1 |
| 11 | " | B120 | " 4'-0" | " | 2.47 |
| 14 | " | B121 | " 5'-0" | " | 7 |
| 2 | " | B60 | " 2'-9" | " | 0 |
| 2 | " | B61 | " 4'-3" | " | 1.8 |
| 2 | " | B62 | " 4'-11" | " | 1.9 |
| 2 | " | B63 | " 6'-4" | " | 2.6 |
| 2 | " | B64 | " 7'-2" | " | 3.5 |
| 2 | " | B65 | " 8'-4" | " | 4.4 |
| 2 | " | B66 | " 9'-4" | " | 5.3 |
| 11 | " | B125 | " 9'-0" | " | 5.3 |
| 33 | " | B126 | " 10'-0" | " | 5.9 |
| 10 | " | B127 | " 12'-0" | " | 6.9 |
| 10 | " | B128 | As detailed 32'-0" | " | 6.7 |
| 2 | " | B129 | Straight 16'-3" | " | 2.8 |
| 2 | " | B130 | " 11'-4" | " | 2.13 |
| 4 | 1/8" | B131 | " 14'-4" | Temp. steel | .86 |
| 1 | " | B132 | " 14'-6" | " | 1.39 |
| 322 | 1/8" | B133 | " 2'-0" | Dowels | 6.45 |
| 28 | 1/8" | B106 | Straight 23'-6" | Temp. steel | 6.86 |
| 4 | 1" | B107 | As detailed 36'-0" | Foundation | 4.40 |
| 2 | " | B108 | " 26'-6" | " | 1.80 |

BILL OF BARS FOR BOTH ABUTS. AND COLS. CONT.

| No. | Size | Mark | Description | Location | WT. |
|-----|------|------|--------------------|-------------|-------|
| 24 | " | B46 | " 5'-0" | " | .80 |
| 2 | " | B47 | " 18'-0" | " | 6.85 |
| 1 | 1" | B109 | As detailed 22'-0" | Foundation | 14.10 |
| 1 | " | B110 | " 16'-3" | " | 8.3 |
| 1 | " | B111 | " 15'-0" | " | 4.21 |
| 1 | " | B112 | " 11'-4" | " | 3.6 |
| 18 | " | B113 | " 17'-8" | " | 3.3 |
| 2 | " | B114 | Straight 44'-0" | " | 1.25 |
| 6 | " | B115 | " 35'-0" | " | .60 |
| 2 | " | B116 | " 23'-0" | " | .23 |
| 2 | " | B117 | " 21'-0" | " | .86 |
| 23 | " | B118 | " 3'-0" | " | 7.4 |
| 8 | " | B119 | " 3'-6" | " | 4.1 |
| 11 | " | B120 | " 4'-0" | " | 2.47 |
| 14 | " | B121 | " 5'-0" | " | 7 |
| 2 | " | B60 | " 2'-9" | " | 0 |
| 2 | " | B61 | " 4'-3" | " | 1.8 |
| 2 | " | B62 | " 4'-11" | " | 1.9 |
| 2 | " | B63 | " 6'-4" | " | 2.6 |
| 2 | " | B64 | " 7'-2" | " | 3.5 |
| 2 | " | B65 | " 8'-4" | " | 4.4 |
| 2 | " | B66 | " 9'-4" | " | 5.3 |
| 11 | " | B125 | " 9'-0" | " | 5.3 |
| 33 | " | B126 | " 10'-0" | " | 5.9 |
| 10 | " | B127 | " 12'-0" | " | 6.9 |
| 10 | " | B128 | As detailed 32'-0" | " | 6.7 |
| 2 | " | B129 | Straight 16'-3" | " | 2.8 |
| 2 | " | B130 | " 11'-4" | " | 2.13 |
| 4 | 1/8" | B131 | " 14'-4" | Temp. steel | .86 |
| 1 | " | B132 | " 14'-6" | " | 1.39 |
| 322 | 1/8" | B133 | " 2'-0" | Dowels | 6.45 |
| 28 | 1/8" | B106 | Straight 23'-6" | Temp. steel | 6.86 |
| 4 | 1" | B107 | As detailed 36'-0" | Foundation | 4.40 |
| 2 | " | B108 | " 26'-6" | " | 1.80 |



ESTIMATED QUANTITIES FOR SUBSTRUCTURE

| Item | Description | Amount |
|------|--|---------------|
| S1 | Class 'E' Concrete - Footings | 7.43 Cu. Yds. |
| S1 | Class 'E' Concrete - Walls | 8.91 Cu. Yds. |
| S2 | Type 'A' Waterproofing | 885 Sq. Yds. |
| E2 | Excavation for Structures Unclassified | 1665 Cu. Yds. |
| S4 | Reinf. Steel, def. bars, Sec. #1-11 Structural Inform. Grade | 11802 Lbs. |
| S9 | Lead Flashing, 15" Wide, 7.5" Sp. Ft. | 127 Lin. Ft. |
| S9 | 3" Cork Expansion Joint Material | 313 Sq. Ft. |
| S14 | Parapet Rail 3" W.I. Pipe, Extra Strang. Incl. Painting (1 Line) | 33 Lin. Ft. |
| S14 | Sidewalk Rail 2" W.I. Pipe, " " " (2 Lines) | 108 Lin. Ft. |

Excavation Note
Excavation for structures, unclassified, is estimated as the cubical content of prisms bounded by vertical planes one foot outside the edge of footing, bottom plane of footing and planes of roadway excavation unclass.
Excavation for Temporary Structures is similarly estimated below planes of roadway excavation, and outside of the limits of excavation for structures, unclass.
(See sheets No 15, 16 & 41)

Correct *[Signature]* Engineer of Structures
Approved *[Signature]* Chief Engineer

Drawn L.C.S. Traced L.C.S. Checked G.P.B.

| Date | By | Description |
|---------|-------|---|
| 3-12-41 | State | E.Wing - Rail Push, Rust, Quon, Excav. Note added |

BR. No. LA-283-170

N.Y.C. System Office of Chief Engineer Chicago, Ill.

BR. No. 100 3/4 ERIE DIVISION STA. 1481+76.1

GRADE SEPARATION.

RICHMOND ST. PAINESVILLE, OHIO.

MASONRY PLAN - WEST ABUTMENT.

Sheet 6 of 19

N.Y.C. R.R. West, Erie Division Plan No. 1094

Scales as shown July 5, 1940 Val. Sec. 203 File No. 100-95