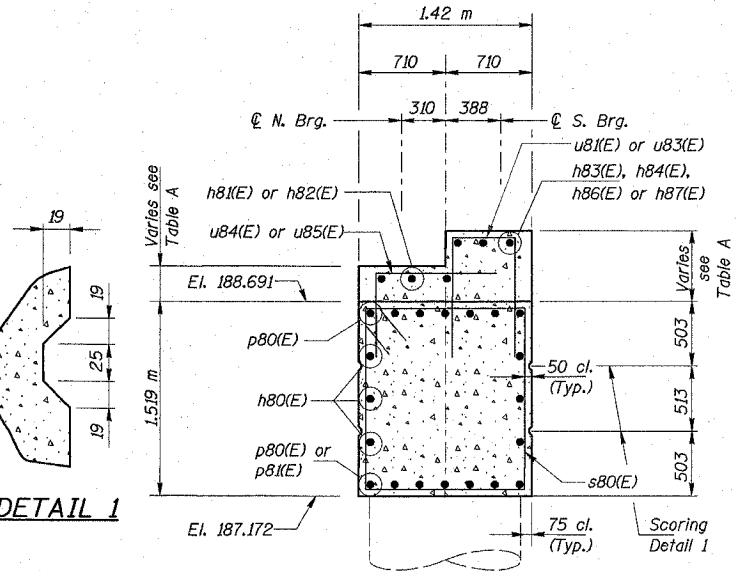


| SPAN 3 | | | | |
|----------|-------------|---|-----|-----|
| BEAM NO. | ANGLE A | a | b | c |
| 1 - 13 | 88°-35'-30" | 9 | 352 | 352 |

| SPAN 4 | | | | |
|----------|--------------|-----|-----|-----|
| BEAM NO. | ANGLE B | a | b | c |
| 1 - 8 | 88°-35'-30" | 9 | 352 | 352 |
| 9 | 92°-36'-08" | 16 | 352 | 352 |
| 10 | 96°-35'-14" | 41 | 360 | 352 |
| 11 | 100°-30'-35" | 65 | 356 | 352 |
| 12 | 104°-20'-08" | 88 | 351 | 352 |
| 13 | 108°-02'-03" | 110 | 345 | 352 |

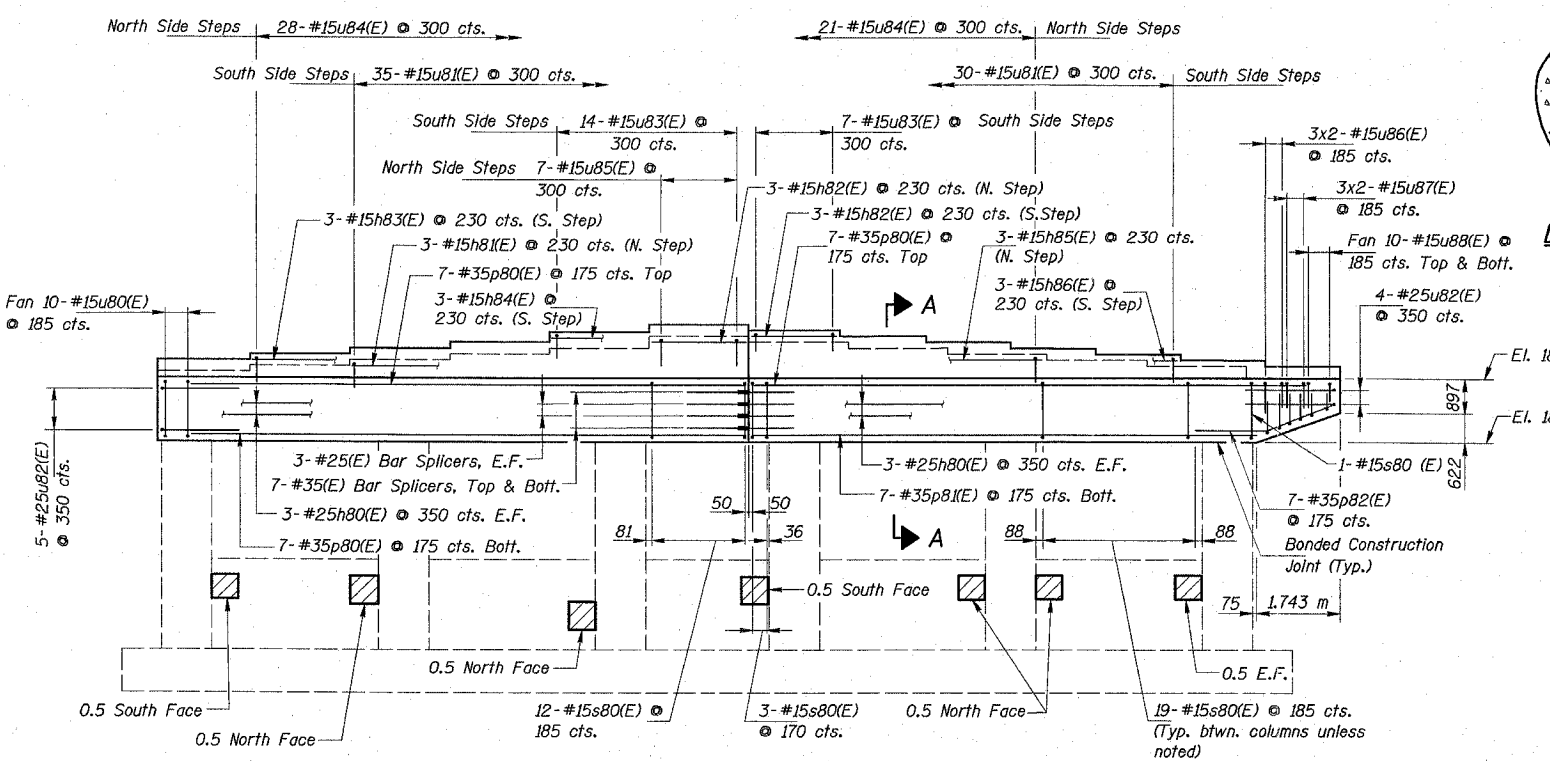
ANCHOR BOLT LOCATIONS



SECTION A-A

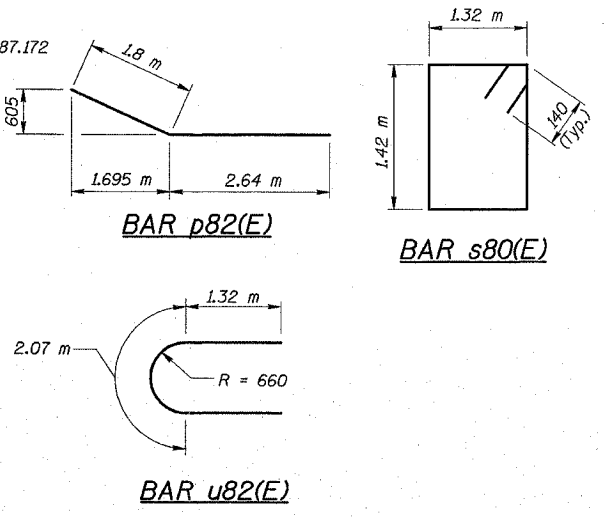
BILL OF MATERIAL

| BAR | NO. | SIZE | LENGTH (m) | SHAPE |
|-------------------------------------|----------------|-------|------------|-------|
| h80(E) | 12 | #25 | 11.70 | — |
| h81(E) | 3 | #25 | 8.30 | — |
| h82(E) | 6 | #15 | 2.00 | — |
| h83(E) | 3 | #15 | 10.25 | — |
| h84(E) | 3 | #15 | 4.10 | — |
| h85(E) | 3 | #15 | 6.20 | — |
| h86(E) | 3 | #15 | 9.03 | — |
| | | | | |
| p80(E) | 21 | #35 | 11.69 | — |
| p81(E) | 7 | #35 | 10.61 | — |
| p82(E) | 7 | #35 | 4.44 | — |
| | | | | |
| s80(E) | 92 | #15 | 5.76 | □ |
| | | | | |
| u80(E) | 10 | #15 | 3.34 | □ |
| u81(E) | 65 | #15 | 1.41 | □ |
| u82(E) | 9 | #25 | 4.71 | □ |
| u83(E) | 21 | #15 | 1.63 | □ |
| u84(E) | 49 | #15 | 1.38 | □ |
| u85(E) | 7 | #15 | 1.47 | □ |
| u86(E) | 6 | #15 | 3.10 | □ |
| u87(E) | 6 | #15 | 2.90 | □ |
| u88(E) | 20 | #15 | 1.69 | □ |
| | | | | |
| Reinforcement Bars, Epoxy Coated | kg | 5,040 | | |
| Concrete Structures | m ³ | 57.4 | | |
| High Performance Enhanced Shotcrete | m ² | 4.0 | | |
| Bridge Seat Sealer | m ² | 37 | | |



ELEVATION

Legend:
 Indicates High Performance-Enhanced Shotcrete in square meters
 E.F. Indicates Each Face



| BAR | A | B |
|--------|-----|--------|
| u80(E) | 960 | 1.42 m |
| u81(E) | 400 | 6.10 |
| u83(E) | 510 | 6.10 |
| u86(E) | 890 | 1.32 m |
| u87(E) | 790 | 1.32 m |

| BAR | A | B |
|--------|-----|-----|
| u84(E) | 420 | 960 |
| u85(E) | 510 | 960 |
| u88(E) | 730 | 960 |

Notes:
 Reinforcement bars designated (E) shall be epoxy coated.
 Space reinforcement in cap to miss anchor bolts.
 All edges shall have standard 20 mm chamfers except as noted.
 Four steps monolithically with cap.
 All dimensions are in millimeters (mm) except as noted.

| LOCATION | BEAM 1 | BEAM 2 | BEAM 3 | BEAM 4 | BEAM 5 | BEAM 6 | BEAM 7 | BEAM 8 | BEAM 9 | BEAM 10 | BEAM 11 | BEAM 12 | BEAM 13 |
|------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Step Elevation S. Brg. | 188.745 | 188.787 | 188.829 | 188.864 | 188.896 | 188.927 | 188.901 | 188.870 | 188.844 | 188.818 | 188.785 | 188.750 | 188.716 |
| Offset | — | 42 | 42 | 35 | 32 | 31 | 26 | 31 | 26 | 26 | 33 | 35 | 34 |
| Step Elevation N. Brg. | 188.717 | 188.759 | 188.801 | 188.836 | 188.868 | 188.899 | 188.873 | 188.842 | 188.810 | 188.775 | 188.733 | 188.691 | — |
| Offset | — | 42 | 42 | 35 | 32 | 31 | 26 | 31 | 32 | 35 | 42 | 42 | — |

COLLINS ENGINEERS
 123 N. WACKER DR., SUITE 300
 CHICAGO, IL 60606
 (312) 704-9300
 ILLINOIS PROFESSIONAL DESIGN FIRM
 LICENSE NO. 184-000993

| REVISIONS | |
|-----------|------|
| NAME | DATE |
| | |
| | |
| | |
| | |
| | |

ILLINOIS DEPARTMENT OF TRANSPORTATION
 F.A.I. 90 (I-90)
 AT NAGLE AVENUE
 F.A.U. RTE. 2783 SEC 1314B
 COOK COUNTY STATION 0+998.813
 STRUCTURE NO. 016-0708

PIER 3 DETAILS
 DRAWN BY KAC
 CHECKED BY LDB/DGS
 DATE: DEC. 2004