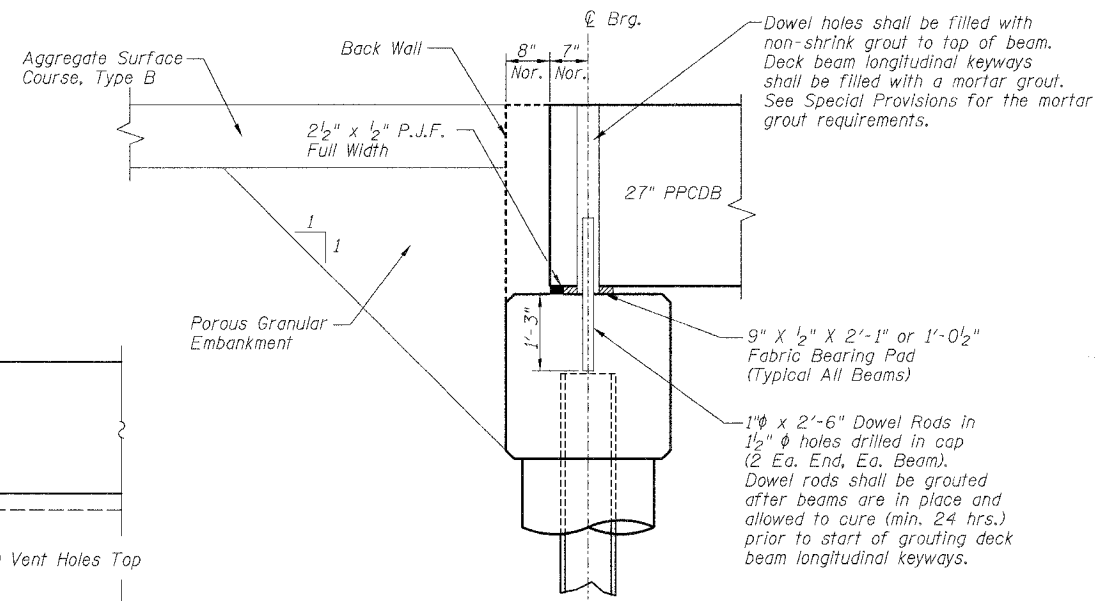
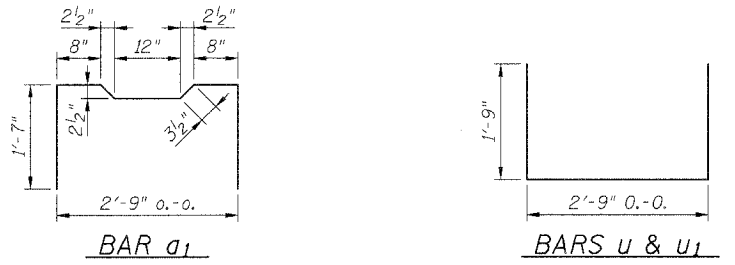
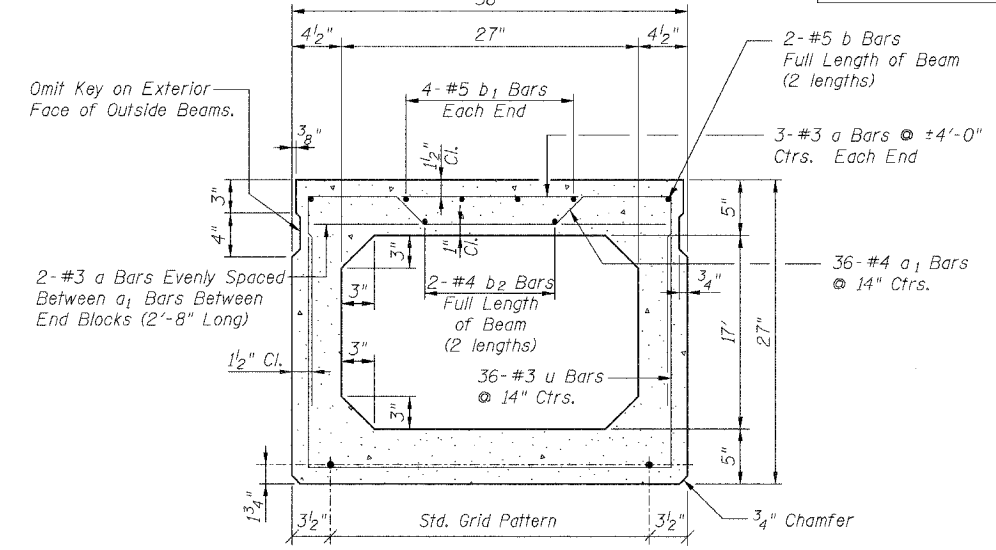
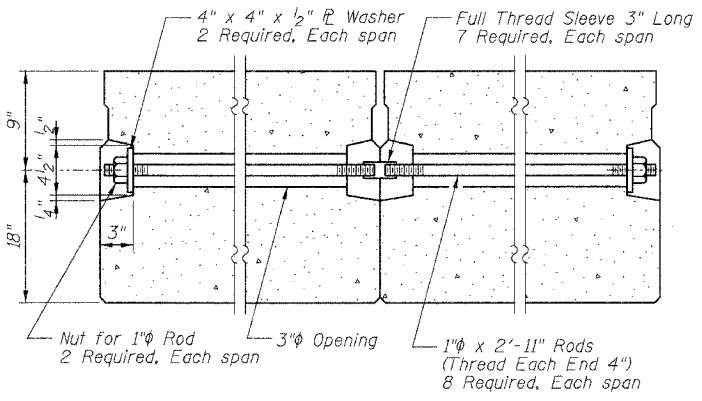
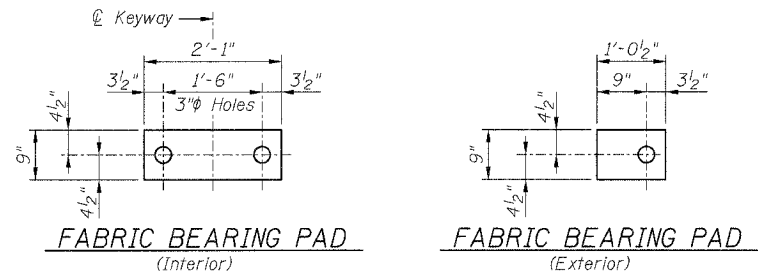
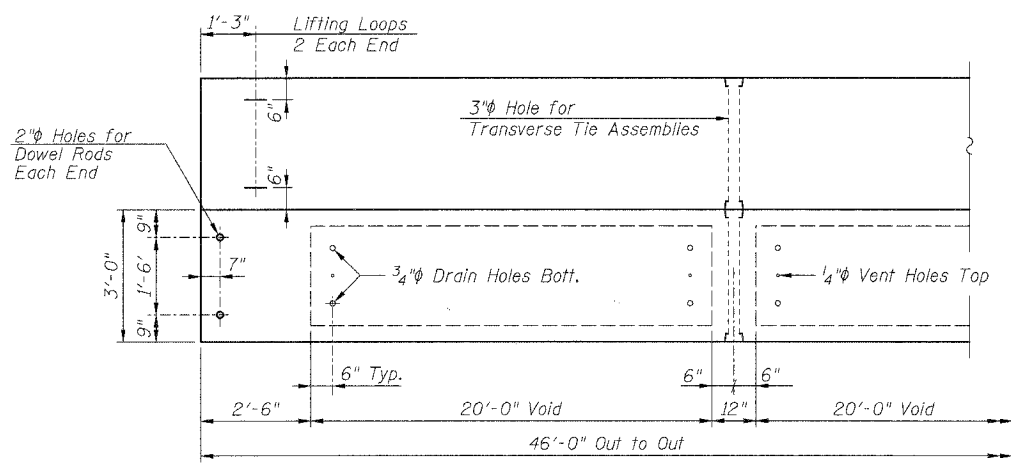
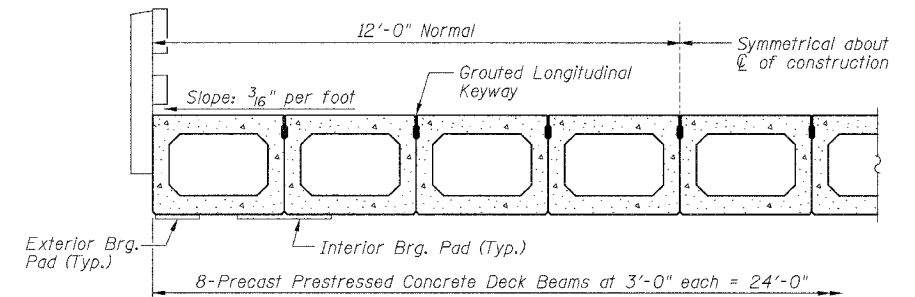


| | | | |
|-----------------------|----------------|---------------------|--------------------|
| ROUTE | SECTION | COUNTY | TOTAL SHEET NO. |
| TR 293 | 96-10120-01-BR | CLAY | 13 |
| FED. ROAD DIST. NO. 7 | ILLINOIS | FEDERAL AID PROJECT | |
| | | | CONTRACT NO. 95514 |



Note: Place Strands Symmetrically about \bar{C} of Beam.
 10-1/2" ϕ Strands Each Strand Stressed to 28,900 Lbs.
 8 - Strands 1 3/4" up,
 2 - Strands 3/4" up



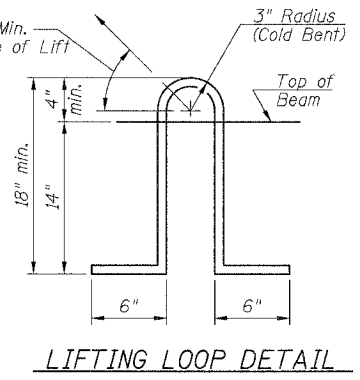
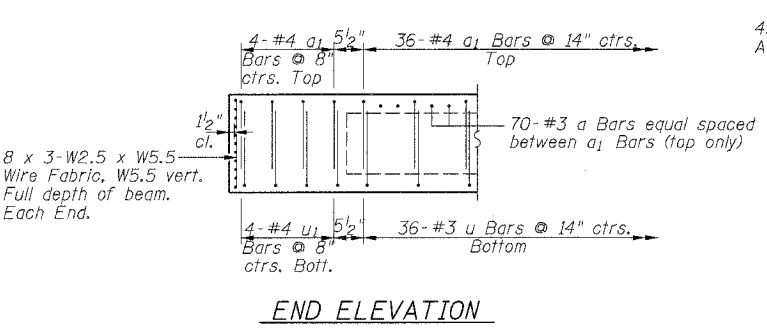
FIXED BEARING ABUTMENT

NOTES

Prestressing steel shall be uncoated high strength, stress-relieved 7-wire strand, Grade 270.
 The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in.
 Lifting loops shall be 3 - 1/2" ϕ - 270 ksi strands, as shown.
 The 1" ϕ rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets that receive transverse tie bar on outside shall be filled with grout after transverse tie assembly is in place.
 Non prestressing steel shall conform to ASTM A 706 (IL MOD), Grade 60.
 The bearing seat surfaces shall be adjusted by shimming to assure firm and even bearing. Two 1/8" fabric adjusting shims of the dimensions of the Exterior Bearing Pad shall be provided for each bearing.
 Keyway surfaces shall be cleaned to remove form oil or other bond breaking material prior to shipment of the beams. Cleaning shall be done by sandblasting the keyway areas between top of the beam and the bottom edge of the key.
 Required Release Strength, f'ci, shall be 4,000 p.s.i.
 An equal substitution of the low-relaxation strands for the stress-relieved strands will be permitted. However, the initial prestressing force applied to each strand shall be the same as for the stress relieved strands (28,900 lbs.)

BILL OF MATERIAL FOR ONE BEAM

| Bar | No. | Size | Length | Shape |
|---|-----|------|---------|-------|
| a | 76 | #3 | 2'-8" | — |
| a1 | 44 | #4 | 6'-1" | ⌒ |
| b | 4 | #5 | 24'-3" | — |
| b1 | 8 | #5 | 9'-3" | — |
| b2 | 4 | #4 | 24'-3" | — |
| u | 36 | #3 | 6'-3" | ⌒ |
| u1 | 8 | #4 | 6'-3" | ⌒ |
| Precast Prestressed Concrete Deck Beams | | | Sq. Ft. | 138 |
| Reinforcement Bars | | | Pound | 620 |
| Total Weight Ea. Beam | | | Pound | 28200 |



**SPANS 1 AND 3
 PRECAST PRESTRESSED CONCRETE
 DECK BEAM DETAILS
 TR 293 BRIDGE OVER
 CN / IC RAILROAD
 SECTION 96-10120-01-BR
 CLAY COUNTY, ILLINOIS**

04.03/2007