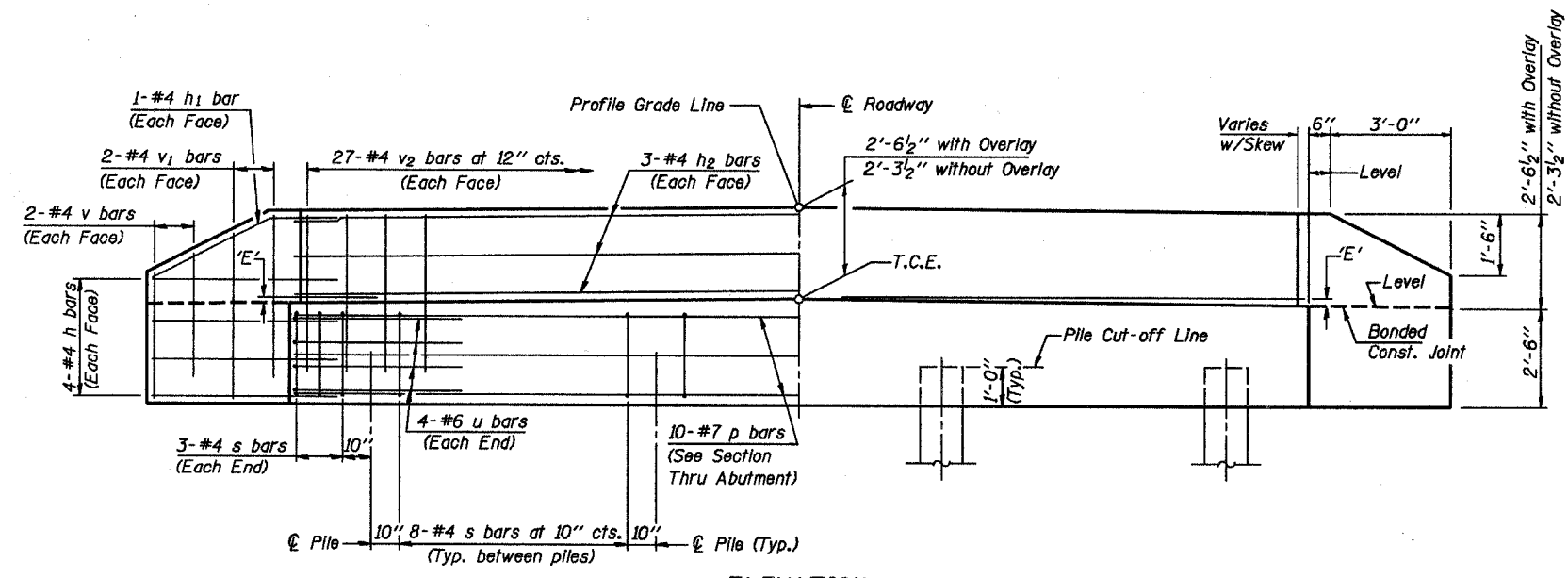


PLAN
(D'=Designated Skew Angle)



ELEVATION

DIMENSION 'E'

| GRADE | D'=15° | | D'=20° | |
|---------------|-------------|---------------|-------------|---------------|
| | UPGRADE END | DOWNGRADE END | UPGRADE END | DOWNGRADE END |
| 0% | 2 3/8" | 2 3/8" | 2 3/8" | 2 3/8" |
| Over 0% to 1% | 2 1/4" | 2 5/8" | 2 1/8" | 2 5/8" |
| Over 1% to 2% | 1 3/4" | 3" | 1 1/2" | 3 1/8" |
| Over 2% to 3% | 1 3/8" | 3 1/2" | 1" | 3 3/4" |
| Over 3% to 4% | 1" | 3 7/8" | 3/8" | 4 1/4" |

NOTES

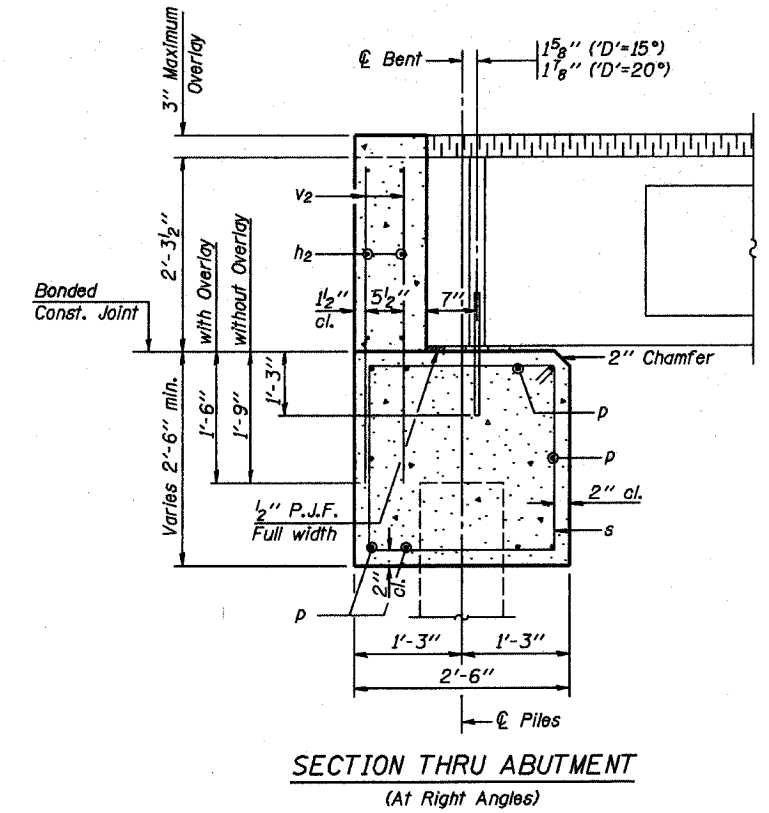
- The Backwall and the portion of the Wingwalls above the bonded construction joint shall be cast against the in-place beam.
- Reinforcement bars shall conform to the requirements of A.A.S.H.T.O. M-31 or M-322, Grade 60.
- Space reinforcement in cap to miss anchor bolts.

MAXIMUM PILE LOADS

| SPAN | TONS |
|------|------|
| 40' | 34 |
| 50' | 38 |
| 60' | 43 |

DESIGN STRESSES

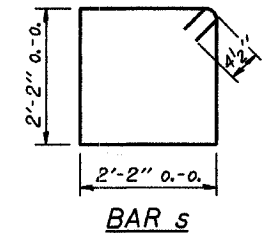
f'c = 3,500 psi
fy = 60,000 psi



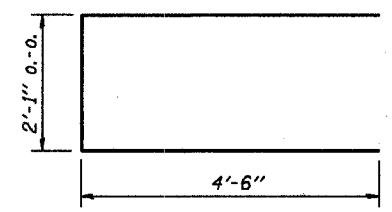
SECTION THRU ABUTMENT
(At Right Angles)

BILL OF MATERIAL FOR ONE ABUTMENT

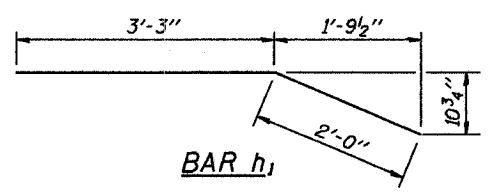
| Bar | No. | Size | Length | Shape |
|---------------------|-----|------|--------------|-------|
| h | 16 | #4 | 5'-0" | — |
| h1 | 4 | #4 | 5'-3" | — |
| h2 | 6 | #4 | 26'-5" | — |
| p | 10 | #7 | 26'-5" | — |
| s | 30 | #4 | 9'-5" | □ |
| u | 8 | #6 | 11'-1" | □ |
| v | 8 | #4 | 3'-2" | — |
| v1 | 8 | #4 | 4'-2" | — |
| v2 | 54 | #4 | 3'-11" | — |
| Concrete Structures | | | 9.7 Cu. Yds. | |
| Reinforcement Bars | | | 1220 Lb. | |



BAR s



BAR u



BAR h1

| P.P.C. DECK BEAMS PILE BENT ABUTMENT | | |
|---|----------|---------------|
| 24' RDWY. | 27" BMS. | D'=15° OR 20° |
| STANDARD CA-2427-20 | | |

Illinois Department of Transportation
 PASSED APRIL 4, 2005
 Thane S. Demaree, Jr.
 Engineer of Bridge Design
 APPROVED APRIL 4, 2005
 Ralph E. Anderson
 Engineer of Bridges and Structures