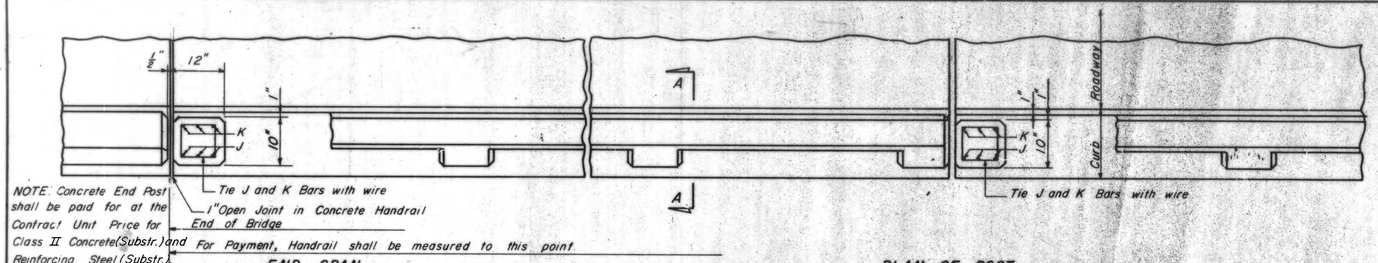
| FED. ROAD DIV. NO. | STATE | PROJECT NO. | FISCAL YEAR | SHEET NO. |
|---|---|---|---|---|
| 3 | FLA. | | | 3 |

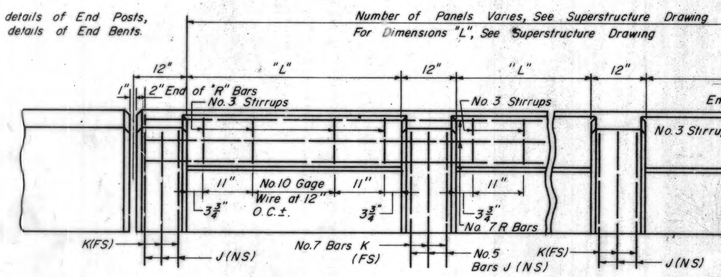



NOTE: Concrete End Post shall be paid for at the Contract Unit Price for Class II Concrete(Substr.) and Reinforcing Steel (Substr.).

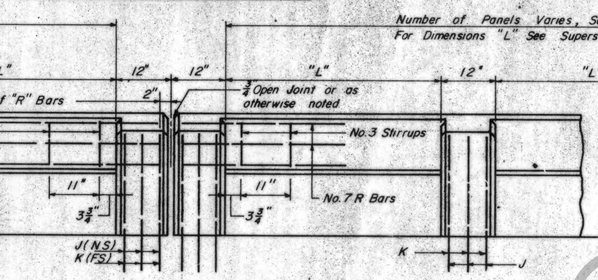
For Payment, Handrail shall be measured to this point.

## END SPAN

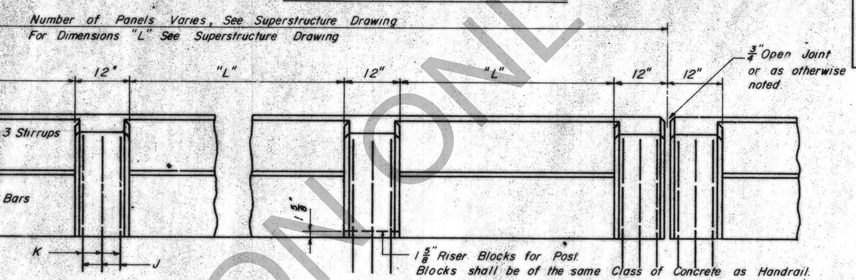
For details of End Posts, see details of End Bents.



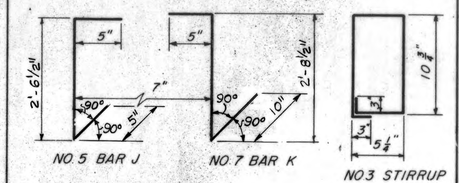

## PLAN OF POST




## INTERMEDIATE SPAN




## BENDING DIAGRAMS




NOTE All bar dimensions are out-to-out

## GENERAL NOTES

CONCRETE: Class III Concrete shall be used in Handrail.

PAYMENT: Handrail shall be paid for per linear foot, which shall include all Concrete and Reinforcing Steel. Handrail shall be measured along the center line of Rail.

CHAMFER: 3/4" Chamfer all edges of Handrails and Posts.

MARKERS: Markers recording the Elevation shall be placed on top of the Curbs at End Bents. On Bridges longer than 100ft, one marker shall be placed at each end of the Bridge. On Bridges less than 100 ft long, one marker shall be placed at one end of the Bridge only. Markers are to be furnished by the Department of Transportation and installed by the Contractor. The Cost of installing the Markers shall be included in the Contract Unit Price for Concrete Handrail.

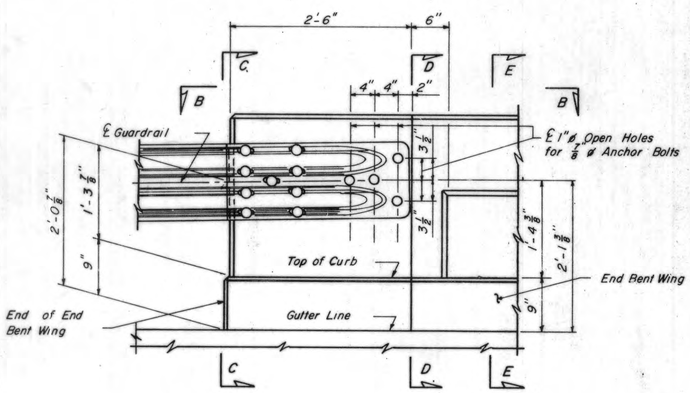
PANEL LENGTHS: Dimension "L" shall not exceed 7'-0".

CYLINDER STRENGTH: The Cylinder Strength of the Concrete shall be 3,750 p.s.i. minimum at 28 days.

ANCHOR BOLTS: Anchor Bolts, Nuts, and Washers shall be hot dip galvanized in accordance with A.S.T.M. A-123.

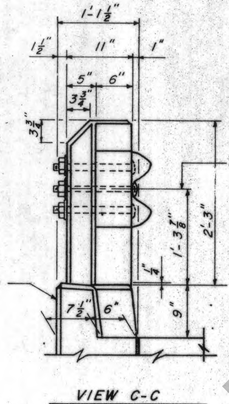
REINFORCING STEEL: GRADE 60

## SIDE ELEVATION

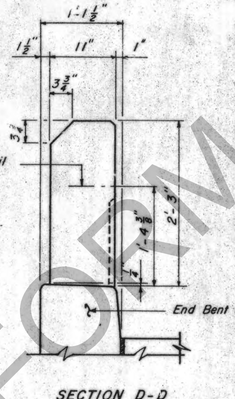



## ELEVATION OF END POST

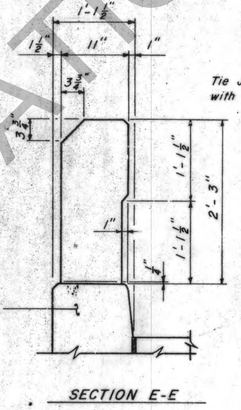
(Showing Guardrail Attachments)



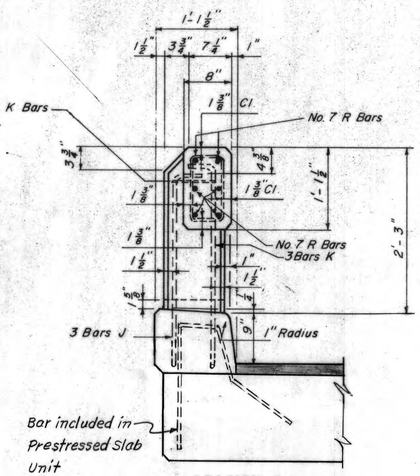

## VIEW C-C




## SECTION D-D

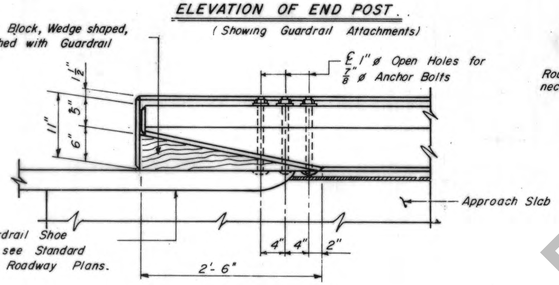



## SECTION E-E

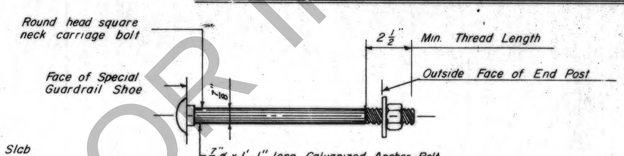



## SECTION A-A

## DETAILS OF GUARDRAIL ATTACHMENT AT END POSTS

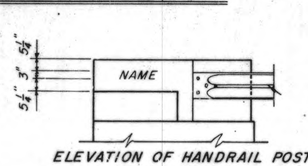



## VIEW B-B




## ANCHOR BOLT DETAIL

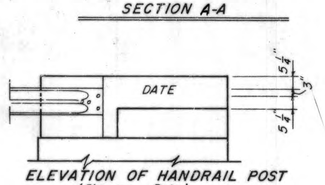
NOTE: Cost of Anchor Bolts to be included in the Contract Unit Price for Guardrail.




## ELEVATION OF HANDRAIL POST

(Showing Name)

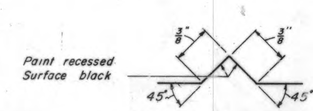
NOTE: The Name to be placed on end bent posts shall be seen on the drivers right when approaching bridge unless otherwise detailed.




## ELEVATION OF HANDRAIL POST

(Showing Date)

NOTE: The Date to be placed on end bent end posts shall be seen on the drivers left when approaching bridge unless otherwise detailed. The Date shall be the year the bridge is constructed




## SECTION THRU RECESSED "V" GROOVE TO FORM INSCRIBED LETTERS AND FIGURES

NOTE: Black Plastic Letters and Figures 3" in height as approved by the Engineer, may be used in lieu of Letters and Figures formed by V-Grooves. V-Grooves shall be formed by preformed Letters and Figures.

FOR INFORMATION ONLY

| REVISIONS | |
|---|---|
| Dates | Descriptions |
| 10/24/71 | Revised Bars J & K and Section A-A to fit Prestressed Slab Units. |
| 5-3-73 | Revised class of concrete. |

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES

# CONCRETE HANDRAIL

| ROAD NO. | COUNTY | PROJECT NO. |
|---|---|---|
| | | |

| | Names | Dates |
|---|---|---|
| Designed by | J R D | 4-70 |
| Checked by | J R A | 4-70 |
| Quantities by | | |
| Checked by | | |
| Supervised by | | |

APPROVED BY: T. Alberdi Jr. — Deputy Design Engineer, Structures

| Drawing No. | Index No. |
|---|---|
| 1 of 1 | 10257-MOD |