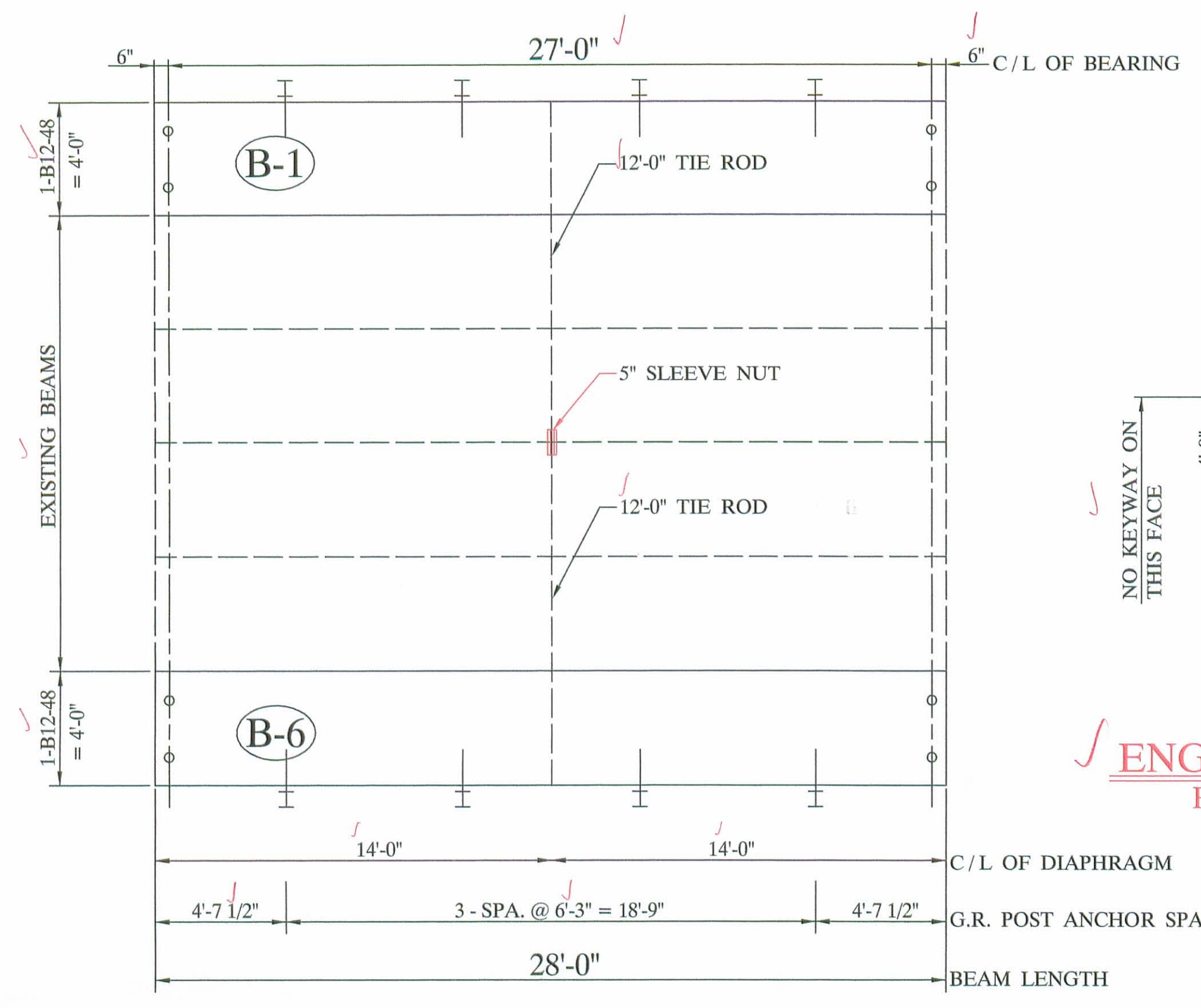
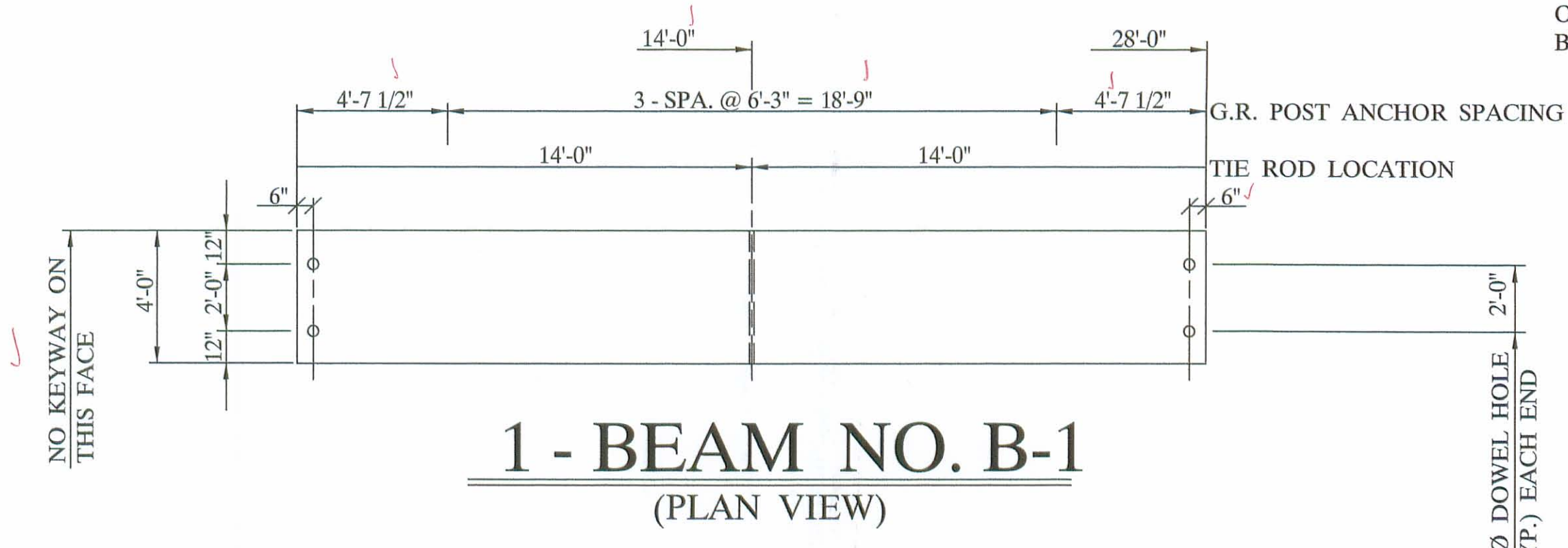


SPO. # 2014

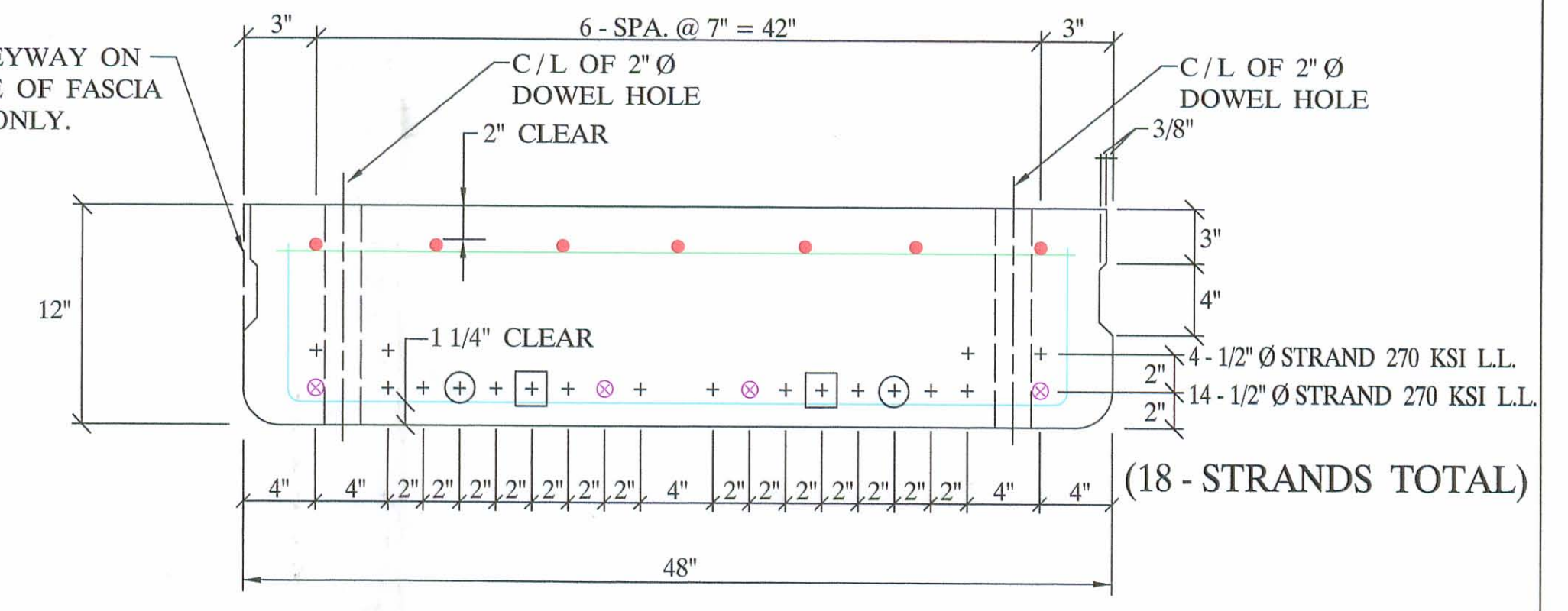
PLEASE MARK SPO. # ON TOP OF ALL BEAMS ALONG WITH COUNTY NAME



DECK PLAN



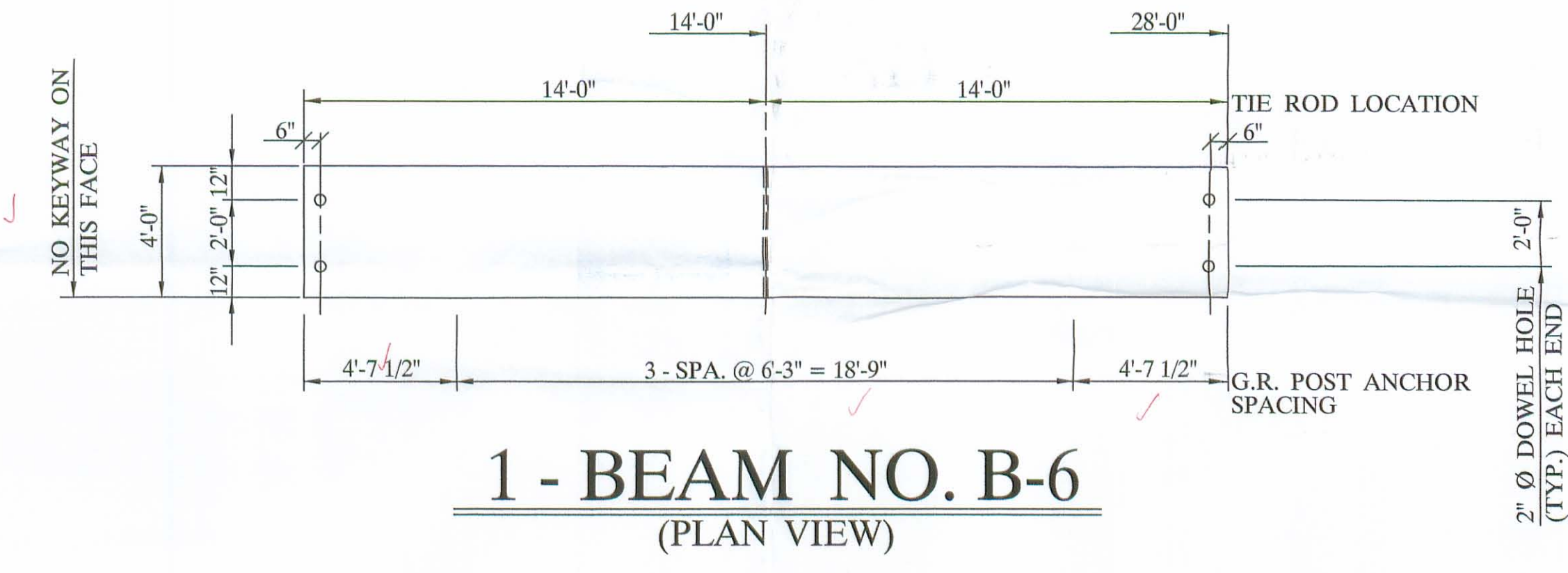
1 - BEAM NO. B-1 (PLAN VIEW)



B12-48 (2 - REQUIRED)

ENGINEER:
PLEASE VERIFY G.R. SPACING.

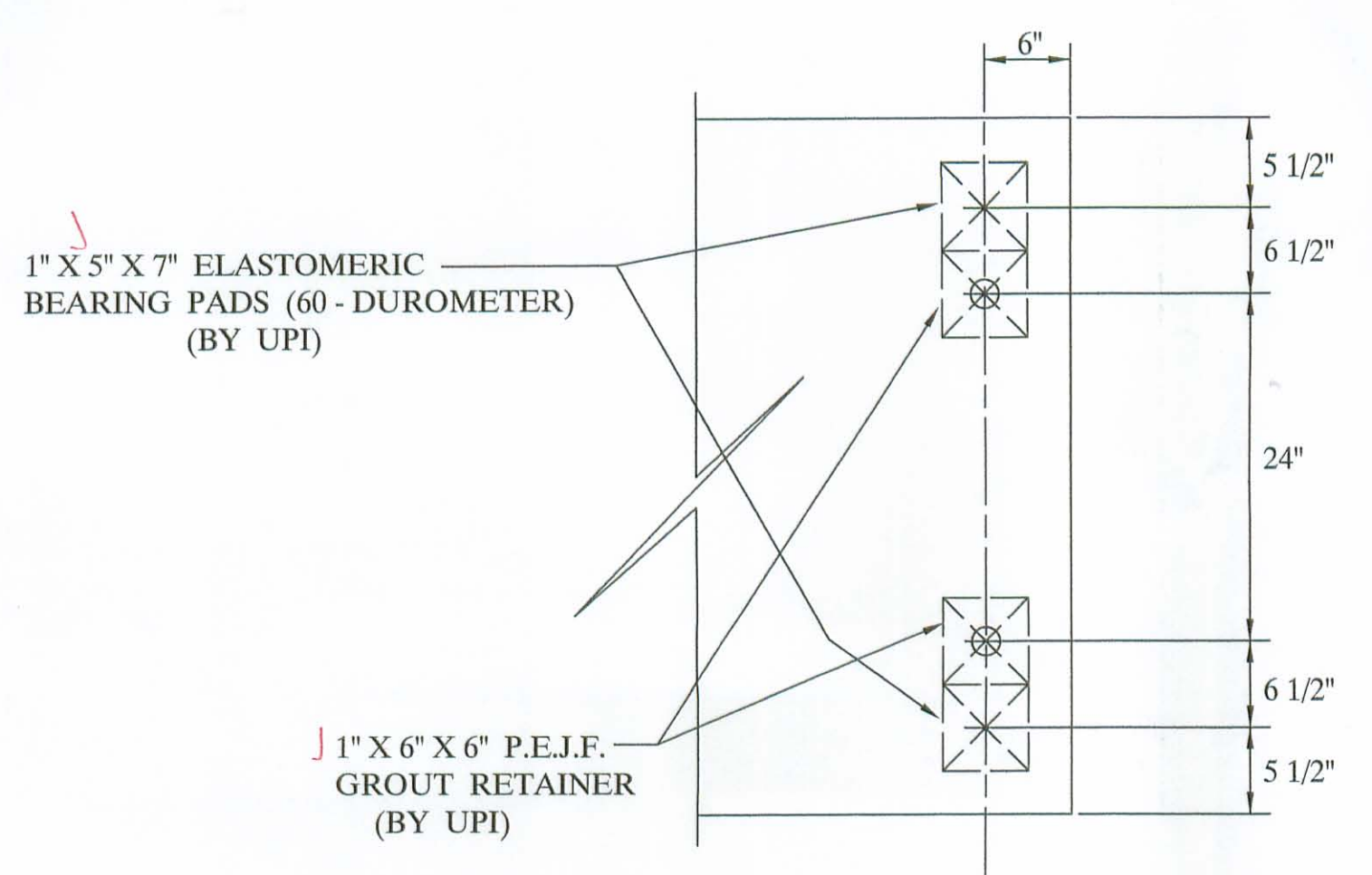
- ENGINEER: PLEASE VERIFY, CONTRACT DRAWINGS CALL FOR #5, ODOT STD. #4?**
- ✓ ● 7 - #4 BARS FULL LENGTH RUN (TOP)
 - ✓ ⊗ 4 - #5 BARS FULL LENGTH RUN (BOTTOM)
 - ✓ + 1/2" Ø STRANDS
 - ✓ ⊕ DEBOND STRAND 1'-6" LONG AT EACH END OF BEAM
 - ✓ ⊕ DEBOND STRAND 2'-6" LONG AT EACH END OF BEAM



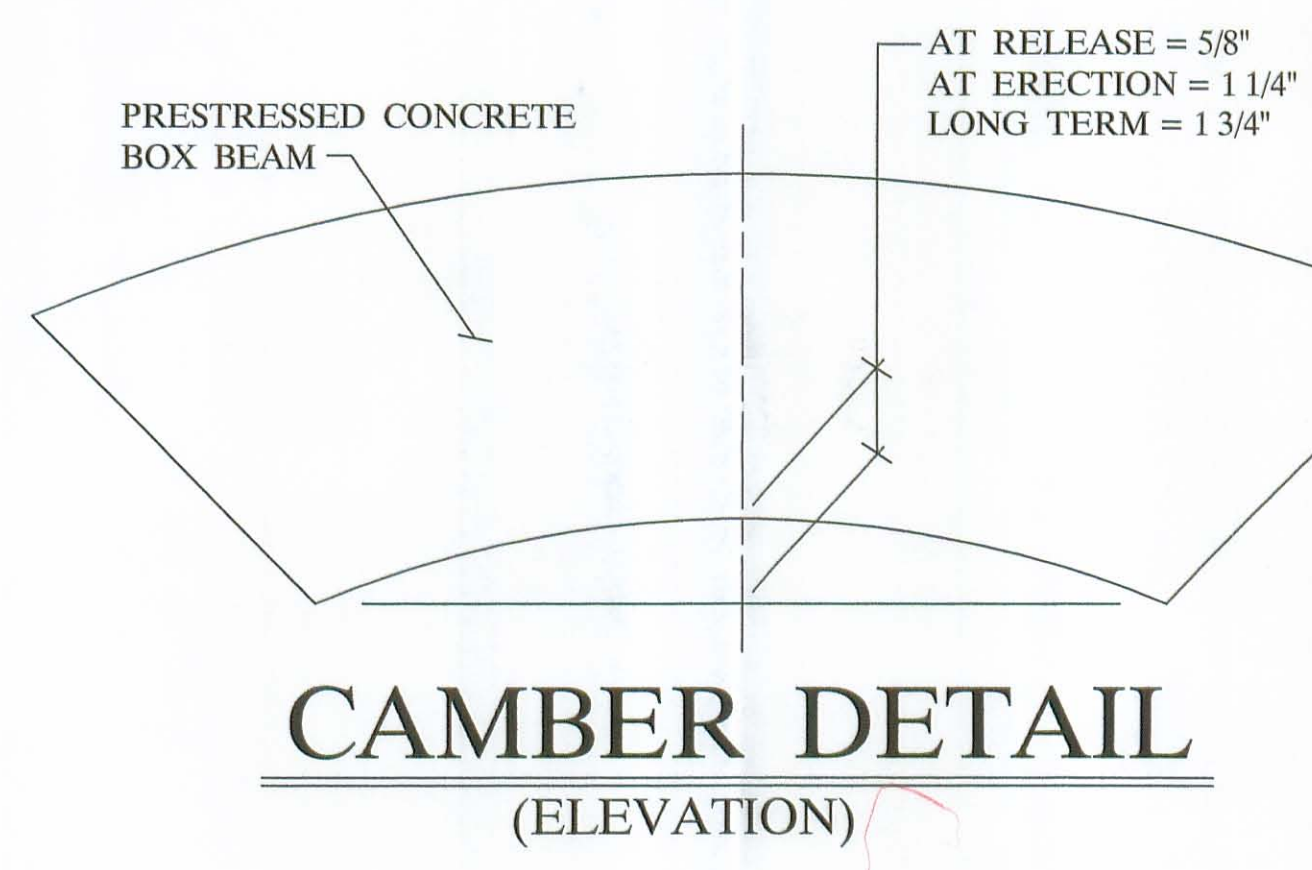
1 - BEAM NO. B-6 (PLAN VIEW)

QUALITY CONTROL NOTE:

- ✓ --- STRAND AREA IS .153 SQ. IN.
- ✓ --- STRAND IS LOW LAX.
- ✓ --- INITIAL LOAD IS 30,982 # / STRAND.
- ✓ --- REBAR IS ALL GRADE - 60.
- ✓ --- STIRRUPS UNDER STRAND.
- ✓ --- CONCRETE STRENGTHS: 5500 PSI AT 28 DAYS
4000 PSI AT RELEASE
- ✓ --- ODOT 2005 SPECIFICATION.



BEARING PAD LAYOUT (PLAN VIEW)



CAMBER DETAIL (ELEVATION)

- 18 Guardrail Post Installed Type 2 8 EA
- 19 " " (off Deck) Ship Loose 8 EA
- 20 Guardrail Element 62.5 LF
- 21 Tubular Back-Up 62.5 LF
- 22 Asphalt Joint Sealer 2' x 1' x 48' ± LF

BILL OF MATERIALS

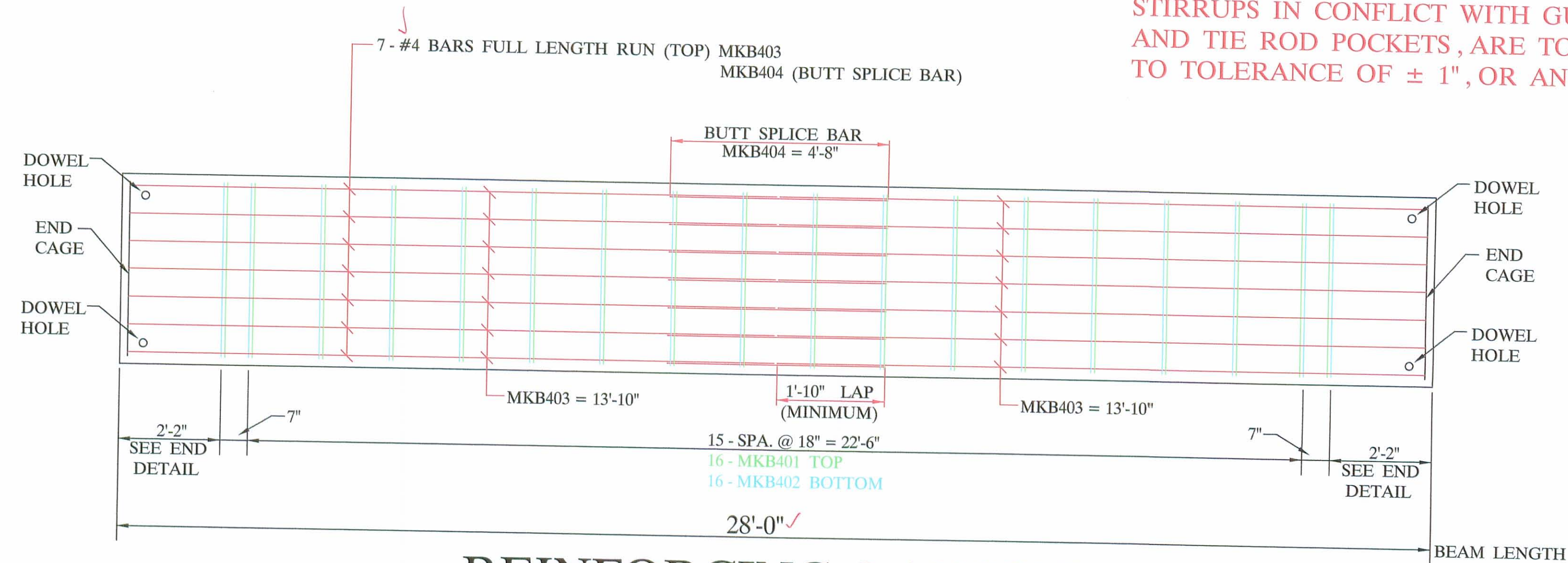
| NO | ITEM | QTY / BEAM | NOTES | TOTAL |
|----|---------------------------|------------|-----------------------------|-----------------|
| 1 | BEAM WEIGHT | | 17,360 # | |
| 2 | CONCRETE | 4.2 CY. | | 8.4 CY. |
| 3 | CALCIUM NITRITE | 16.8 GAL. | (D.C.I.) 4 - GAL. / CY. | 33.6 GAL. |
| 4 | STRAND | | 1/2" Ø STRAND 270 KSI L.L. | 3,960 L.F. |
| 5 | RE - STEEL | | GRADE - 60 | 745 # |
| 6 | TIE RODS | 12'-0" | 1" Ø STEEL ROD | 2 EA. |
| 7 | TIE ROD SLEEVES | | | 24 L.F. |
| 8 | SLEEVE NUT | 5" | | 1 EA. |
| 9 | TYPE - B - ANCHORS | | | 16 EA. |
| 10 | TYPE - C - ANCHORS | | | 8 EA. |
| 11 | DOWELS & SLEEVES | | | 8 EA. |
| 12 | WASSER | | MC - TAR | 24 EA. |
| 13 | SILANE | | | 0.1 GAL. |
| 14 | JUTE | | | 0.9 GAL. |
| 15 | BEARING PADS | | 1" X 5" X 7" , 1 - lam. | 140 EA. |
| 16 | P.E.J.F. | | 1" X 6" X 6" Grout Retainer | 24 EA. |
| 17 | NON-SHRINK GROUT ADDITIVE | | | 8.2 S.F. 24 EA. |
| | | | | 9 LBS. |

| | | | | |
|---|---|-------------------------------|-----------------------|-----------------------|
| <p>UNITED PRECAST INC. ROUNDHOUSE LANE MOUNT VERNON , OHIO 43050 PHONE : (740) 393-1121 FAX : (740) 393-0044</p> | DESCRIPTION: BOX BEAM DETAILS | SCALE: ----- | DRAWN BY: PHIL | |
| | JOB NAME: ITEM 515 BRIDGE NO. LOG - 113 - 1.73 LOGAN COUNTY PROJECT NO. C.R. 113 | APPROVED BY: E.O.C. 2/1/07 | REVISED: | DRAWING NO. 1 OF 3 |
| | DATE: JANUARY 2007 | DATE: JANUARY 2007 | DATE: JANUARY 2007 | DATE: JANUARY 2007 |

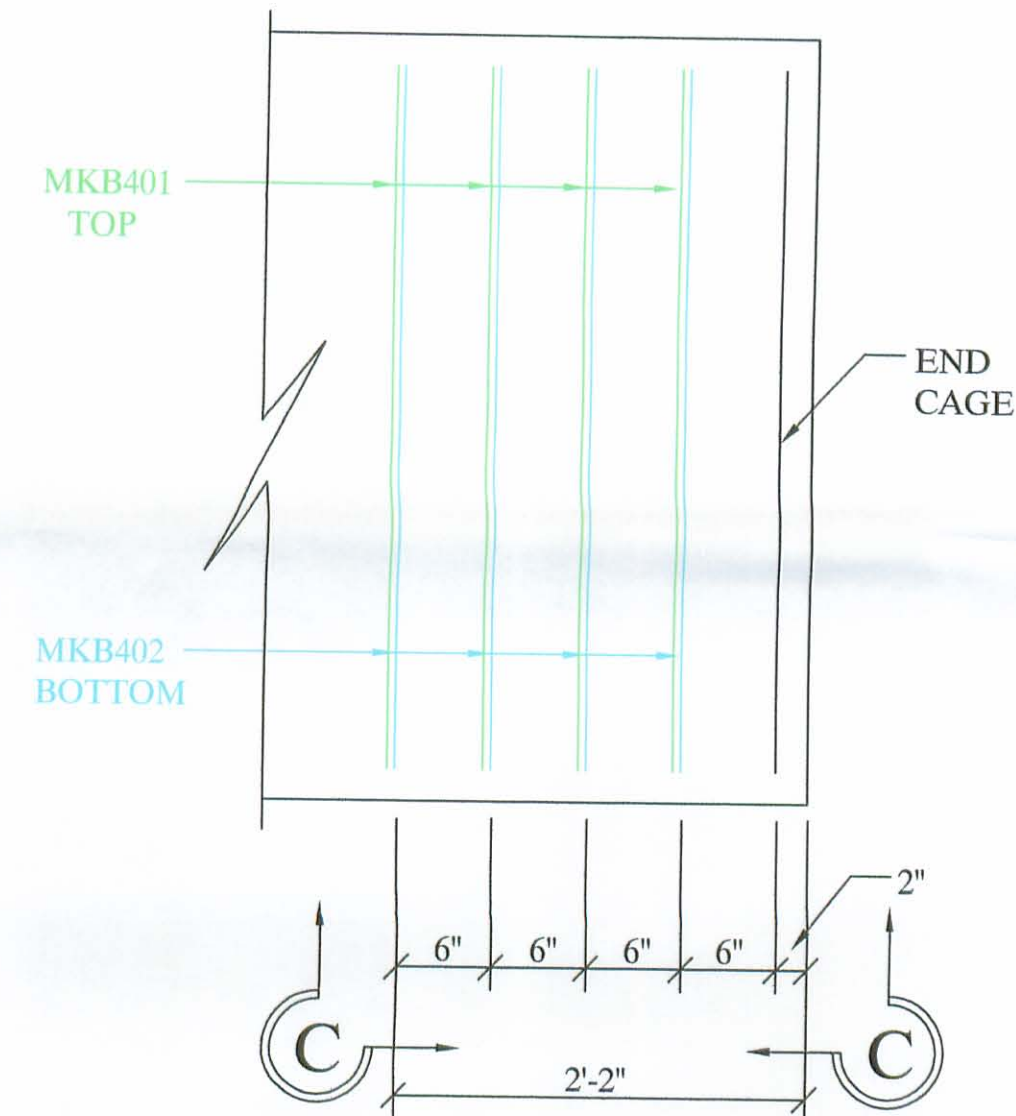
This drawing is the property of United Precast, Inc. or one of its affiliates and may contain information that is confidential or privileged. You are hereby notified that any disclosure, distribution or copying of the contents is prohibited without prior written consent from United Precast, Inc.

NOTE:

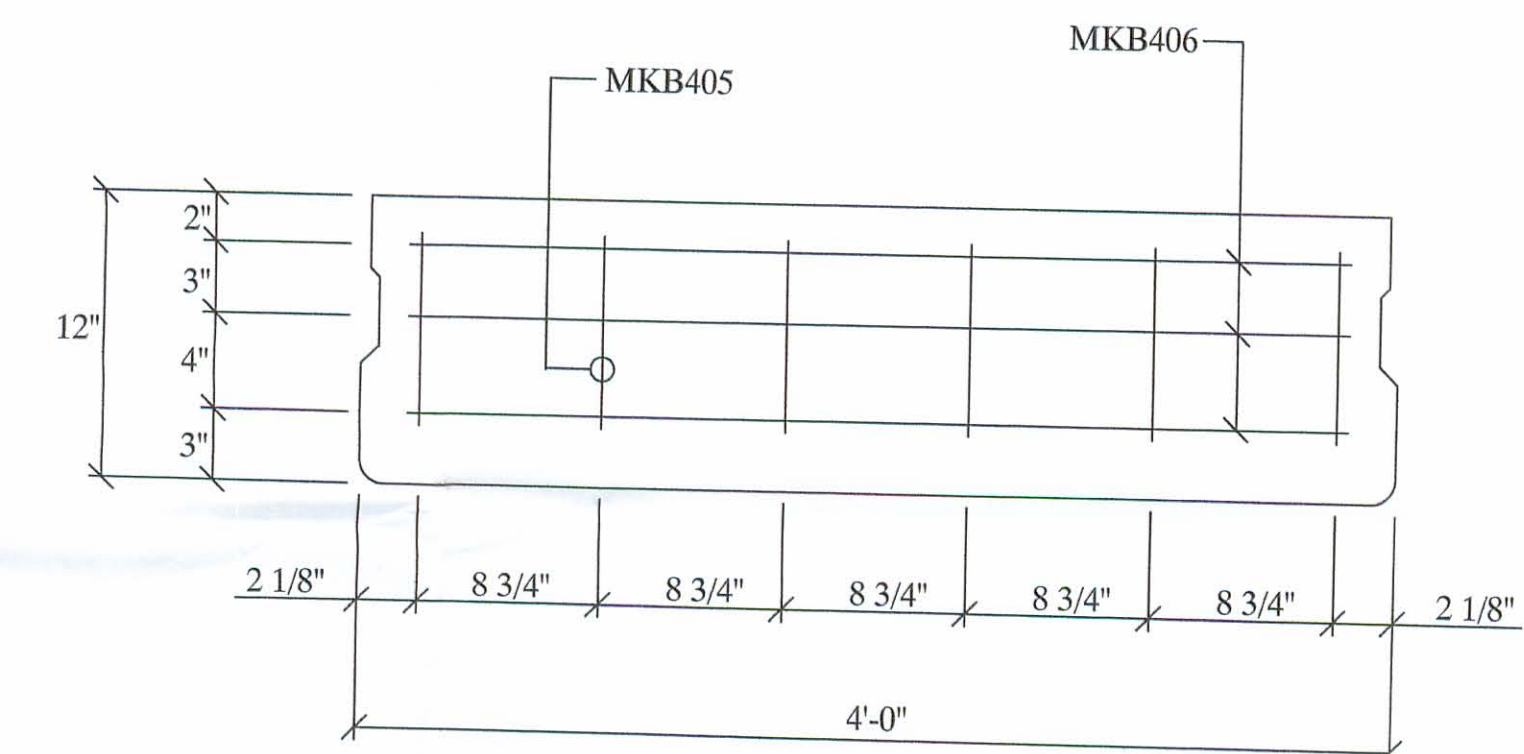
STIRRUPS IN CONFLICT WITH GUARDRAIL ANCHORS AND TIE ROD POCKETS, ARE TO BE SHOP ADJUSTED TO TOLERANCE OF ± 1", OR ANOTHER STIRRUP ADDED.



REINFORCING LAYOUT
(PLAN VIEW)

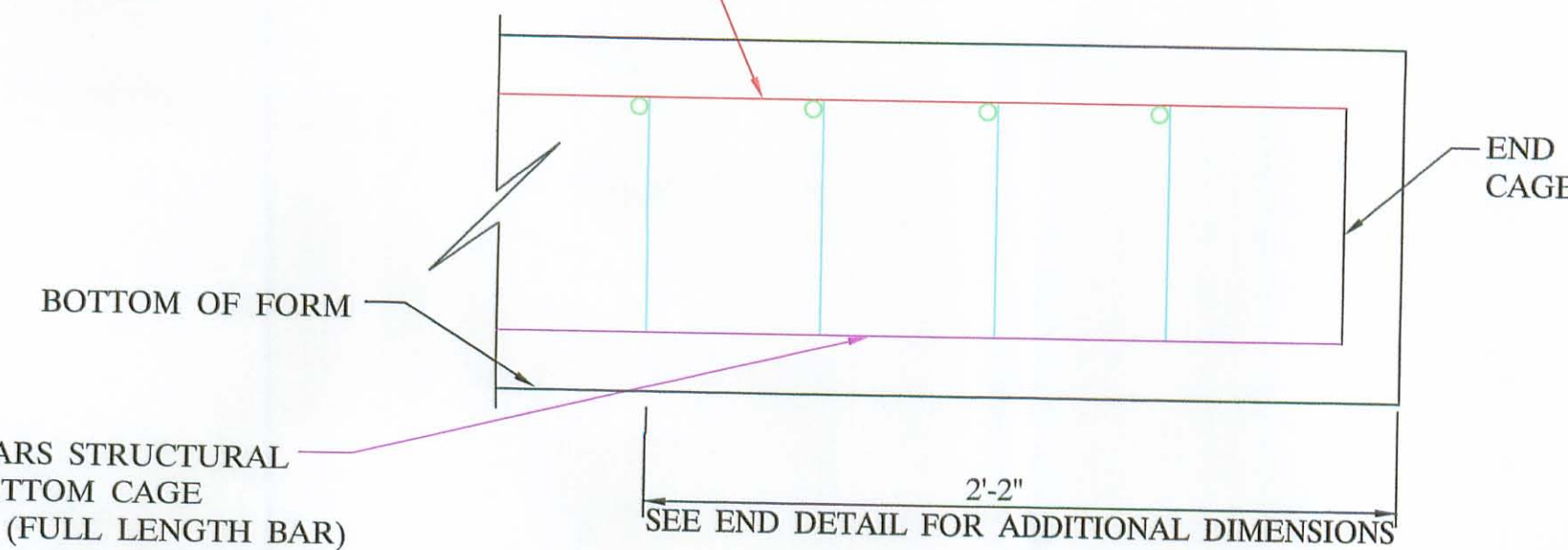


(TYP.) END DETAIL
(PLAN VIEW)

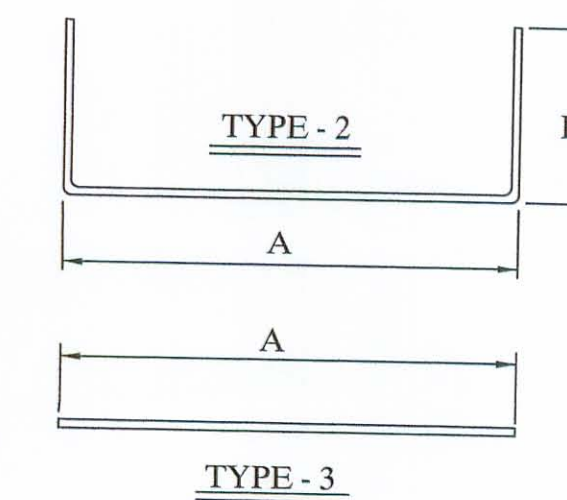


BEAM END CAGE
(ELEVATION)

TOP LONGITUDINAL BARS & TOP STIRRUPS ASSEMBLED IN TOP CAGE & PLACED IN BED IN UNITS OF VARIOUS LENGTH WITH TOP BARS BUTT SPLICED AT INTERSECTIONS.



SECTION C-C
(ELEVATION)



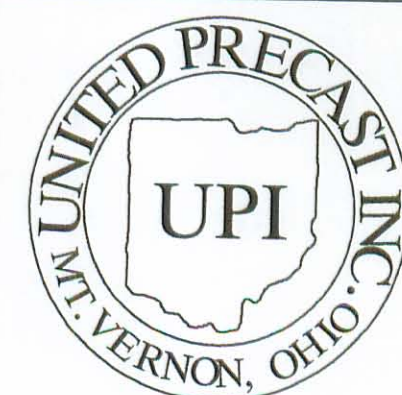
2 - B12-48 X 28'-0" WITH NO SKEW
BAR LIST

| MARK | SIZE | LENGTH | QUANTITY | SHAPE | A | B | C |
|------|------|-----------|----------|----------|---------|----|---|
| B401 | 4 | 3'-7" | 48 | TYPE - 3 | 43" | | |
| B402 | 4 | 4'-8 1/2" | 48 | TYPE - 2 | 43" | 8" | |
| B403 | 4 | 13'-10" | 28 | TYPE - 3 | 13'-10" | | |
| B404 | 4 | 4'-8" | 14 | TYPE - 3 | 4'-8" | | |
| B405 | 4 | 8" | 24 | TYPE - 3 | 8" | | |
| B406 | 4 | 3'-8 3/4" | 12 | TYPE - 3 | 44 3/4" | | |
| B501 | 5 | 13'-10" | 8 | TYPE - 3 | 13'-10" | | |
| B502 | 5 | 5'-10" | 4 | TYPE - 3 | 5'-10" | | |

MKB501 = 13'-10"

MKB501 = 13'-10"

MKB502 = 5'-10"

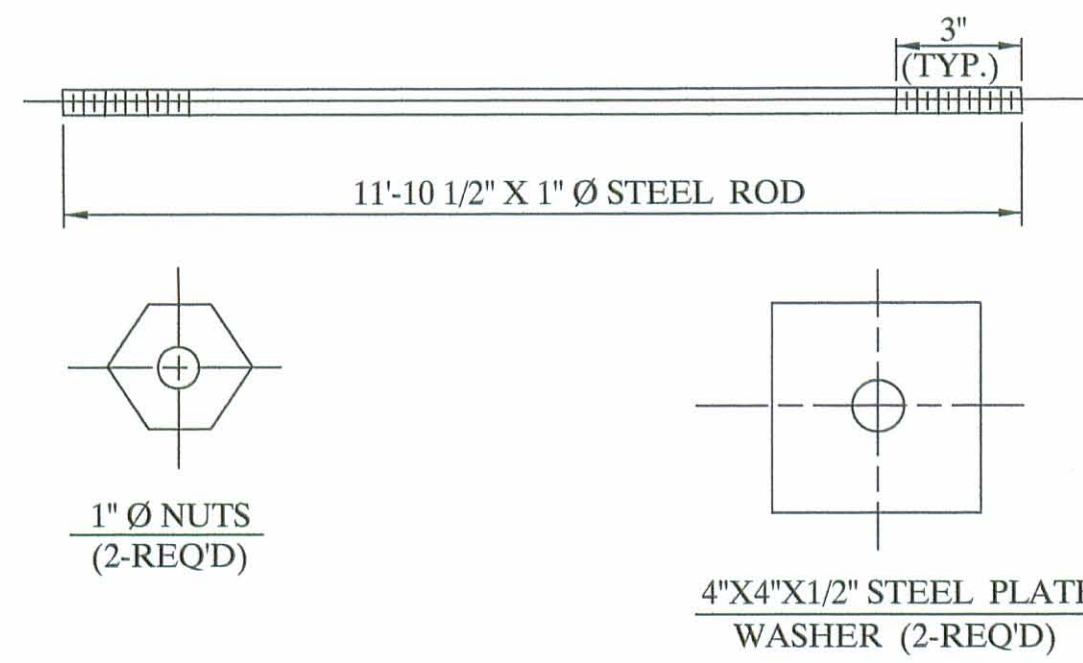


UNITED PRECAST INC.
ROUNDHOUSE LANE
MOUNT VERNON, OHIO 43050
PHONE : (740) 393-1121
FAX : (740) 393-0044

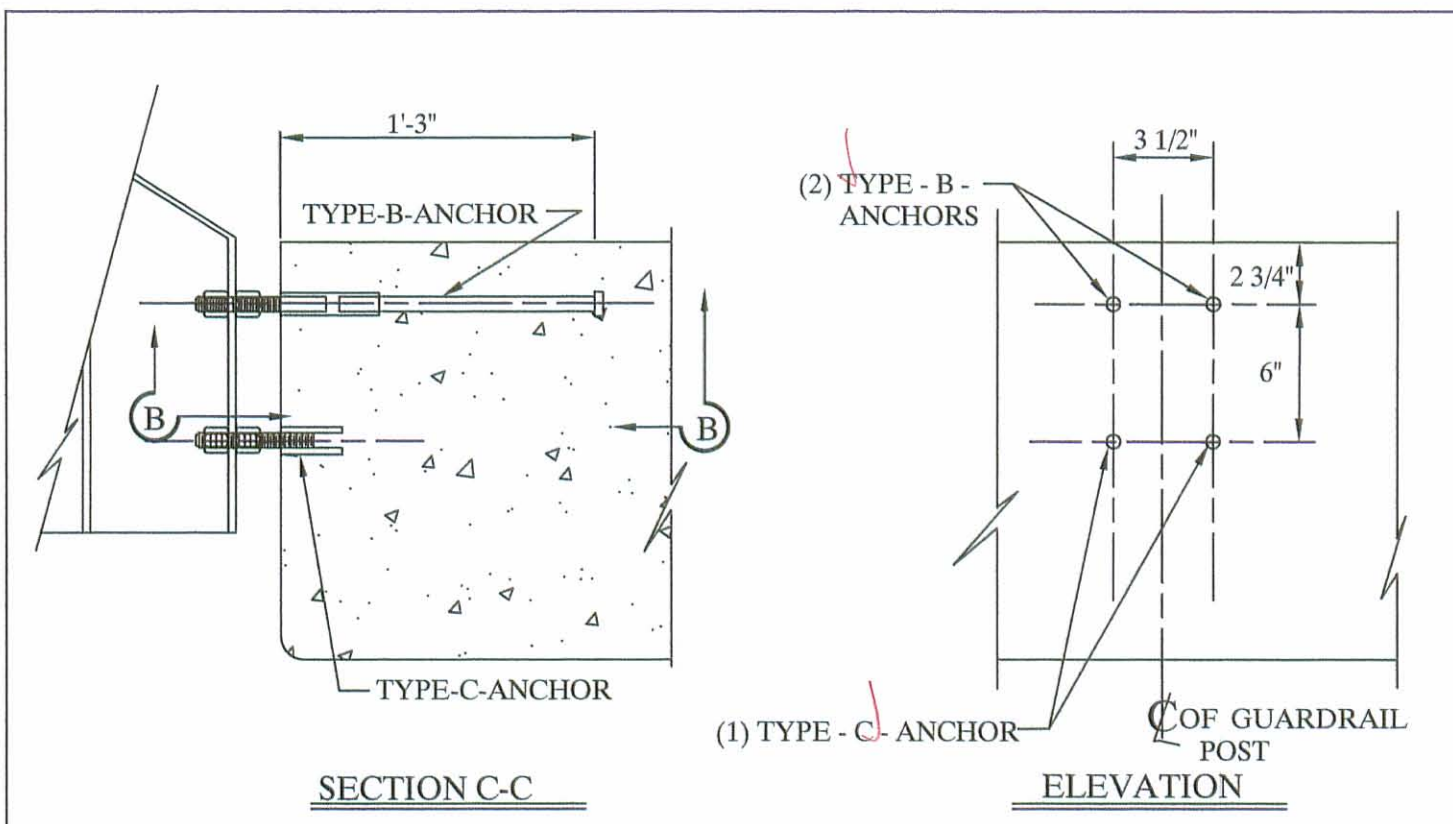
| | | | |
|---|-------------------------------|-----------------------|-------------------|
| DESCRIPTION: REINFORCING DETAILS | | SCALE: ----- | DRAWN BY: PHIL |
| JOB NAME: BRIDGE NO. LOG - 113 - 1.73 LOGAN COUNTY PROJECT NO. C.R. 113 | | REVISED: | |
| DATE: JANUARY 2007 | APPROVED BY: E.O.C. 2/1/07 | DRAWING NO. 2 OF 3 | |

This drawing is the property of United Precast, Inc. or one of its affiliates and may contain information that is confidential or privileged. You are hereby notified that any disclosure, distribution or copying of the contents is prohibited without prior written consent from United Precast, Inc.

12'-0" TIE ROD ASS'Y

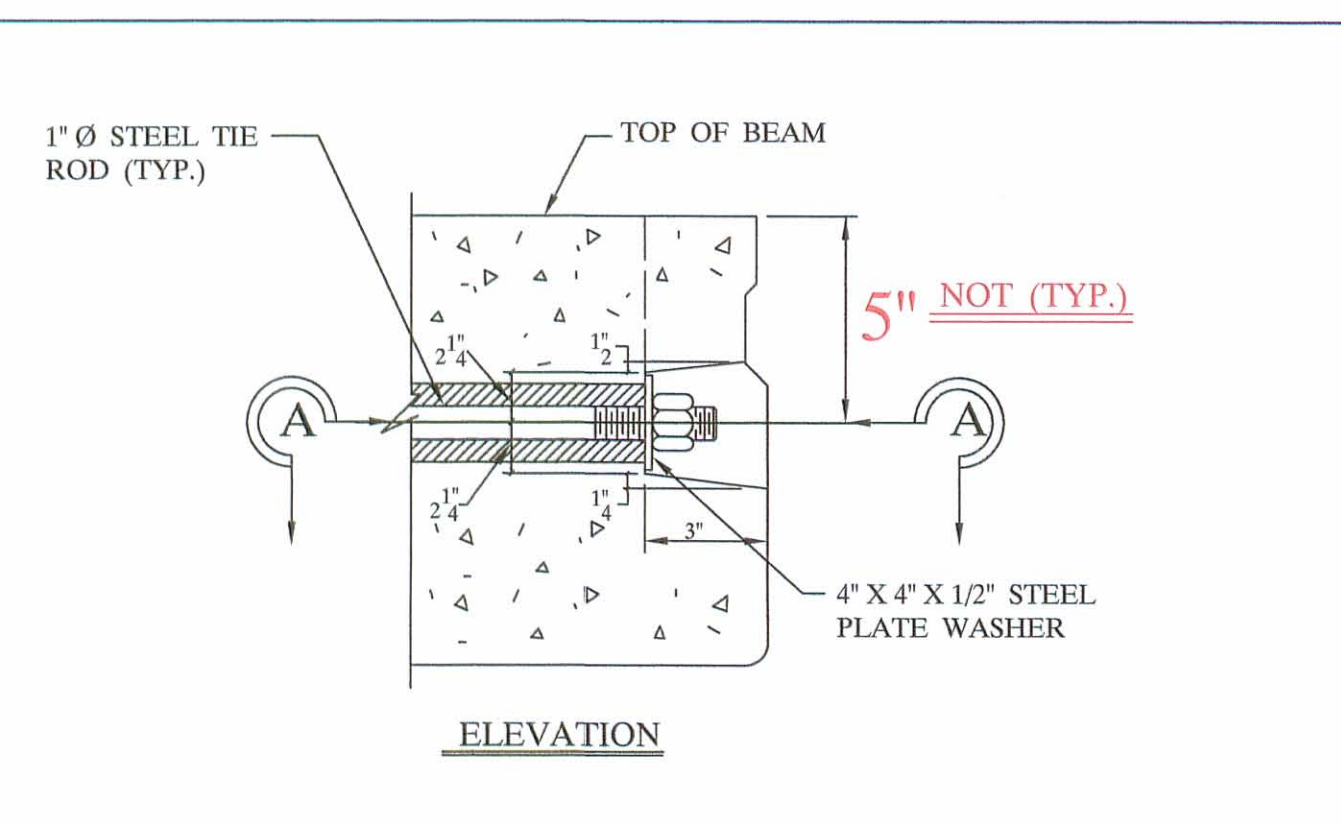


NOTE:
ALL ITEMS INCLUDING TIE RODS ACCESSORIES SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM-123 OR 153. PER CMS 711.02, UNLESS OTHERWISE NOTED.



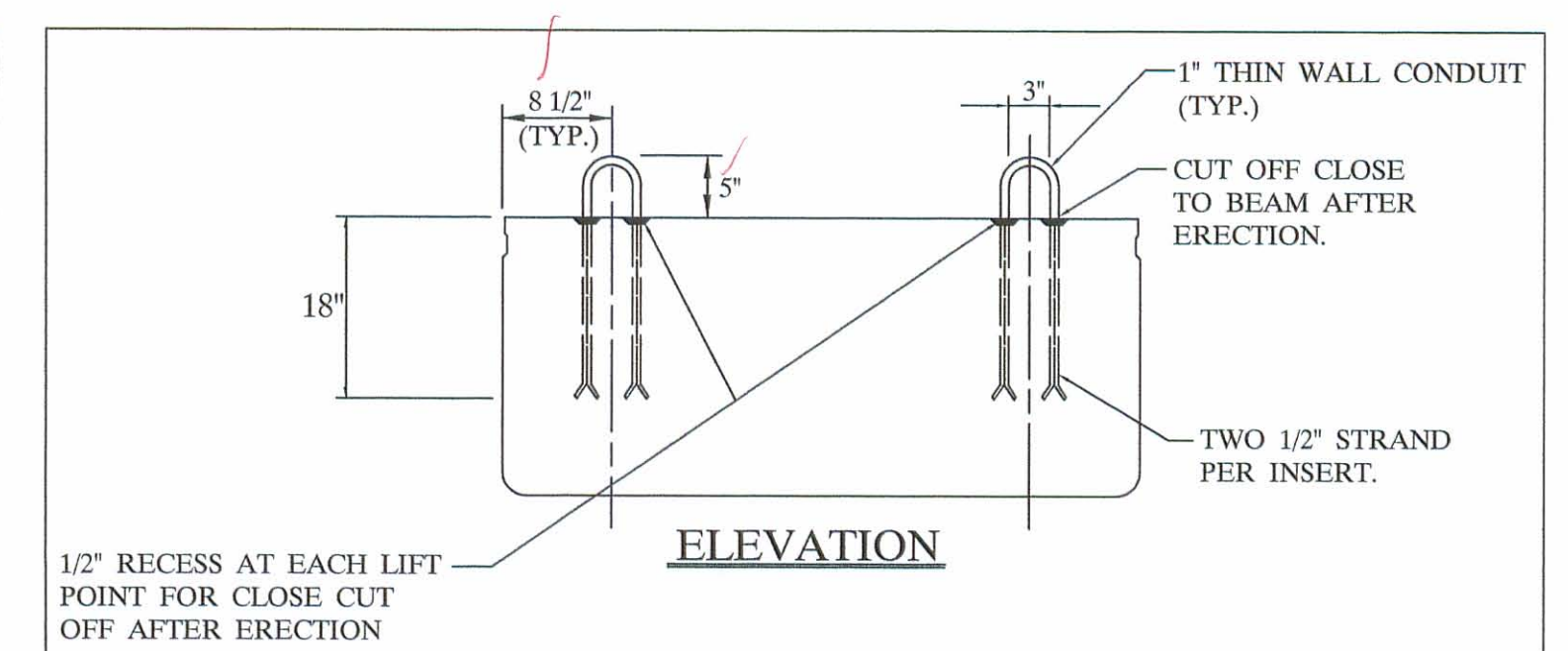
NOTE:
ONE TYPE "C" ANCHOR PROVIDES FOR (2) STUDS (SEE BELOW).

NOTE:
TYPE B & C ANCHOR ASSEMBLIES SHALL CONFORM TO PHYSICAL PROPERTIES OF ASTM-A-325. EXCEPT MIN. ELONGATION SHALL BE 10%. THE CHEMICAL PROPERTIES ARE WAIVED.



NOTE:
THE RODS SHALL BE A311 - G1018 STEEL, OR A-36 MODIFIED.

END DETAIL OF TRANSVERSE TIE ROD ANCHORAGE

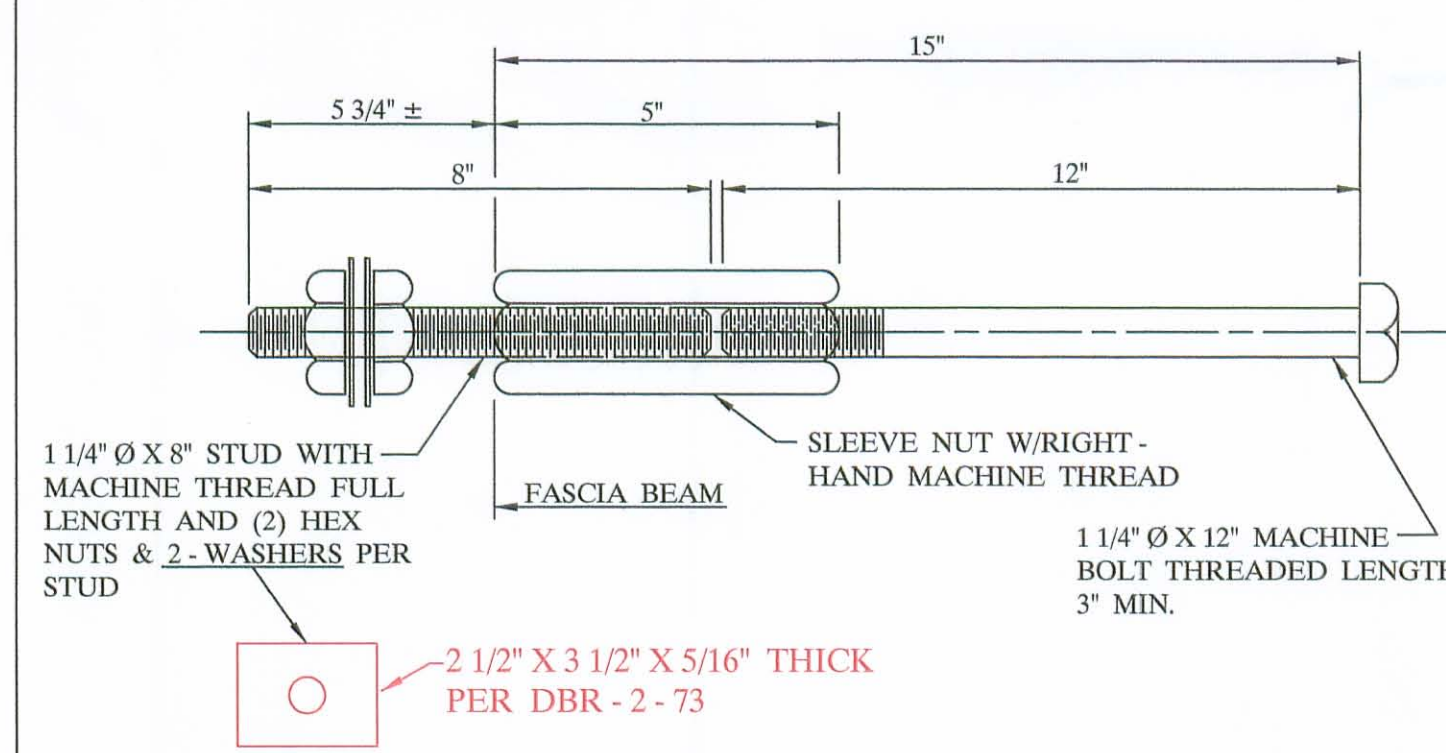


NOTE:
FOR SHALLOW BEAMS BEND LOWER END OF INSERTS TOWARD MIDSPAN TO MAINTAIN MIN. COVER OF 1 3/4".

NOTE:
LIFTING INSERTS ARE HAND PLACED IN THE SHOP AND ARE TO BE ADJUSTED TO CLEAR REINFORCEMENT, ANCHOR DOWEL SLEEVES, TIE ROD SLEEVES, OR ANY ADDITIONAL EMBEDDED ITEMS IN THIS REGION.

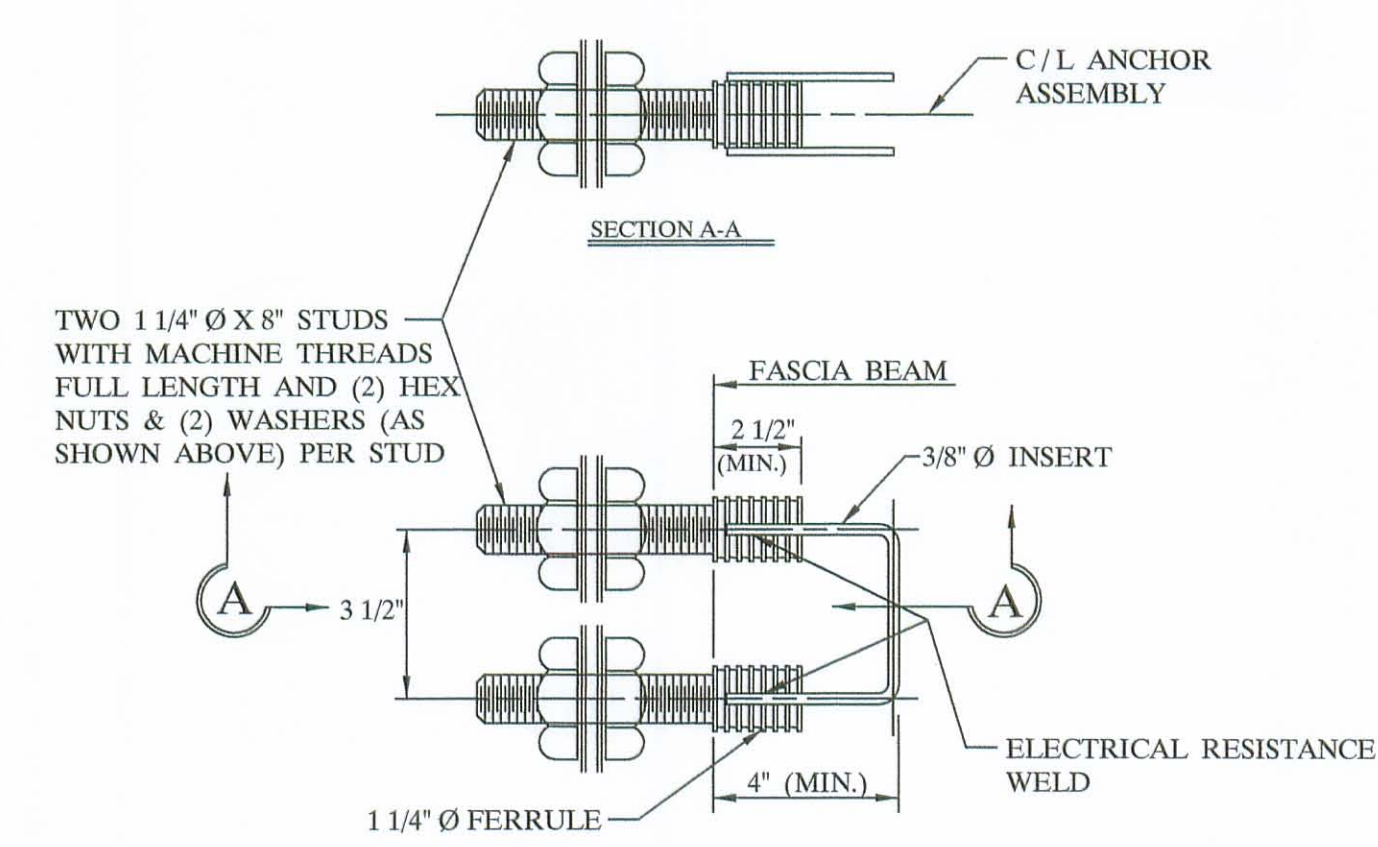
LIFTING INSERT DETAIL

TYPE "B" ANCHOR



NOTE:
1) GALVANIZE ALL HARDWARE PER CMS. 711.02.
2) PROVIDE A BROOM FINISH ON TOP SURFACE OF BEAM SUITABLE FOR WATERPROOFING.
3) ADD D.C.I. TO CONCRETE (4 - GAL. / CUBIC YARD).
4) WATERPROOF BEAM ENDS.
5) DETENSION STRAND SYMETRICALLY ABOUT CENTERLINE.

TYPE "C" ANCHOR

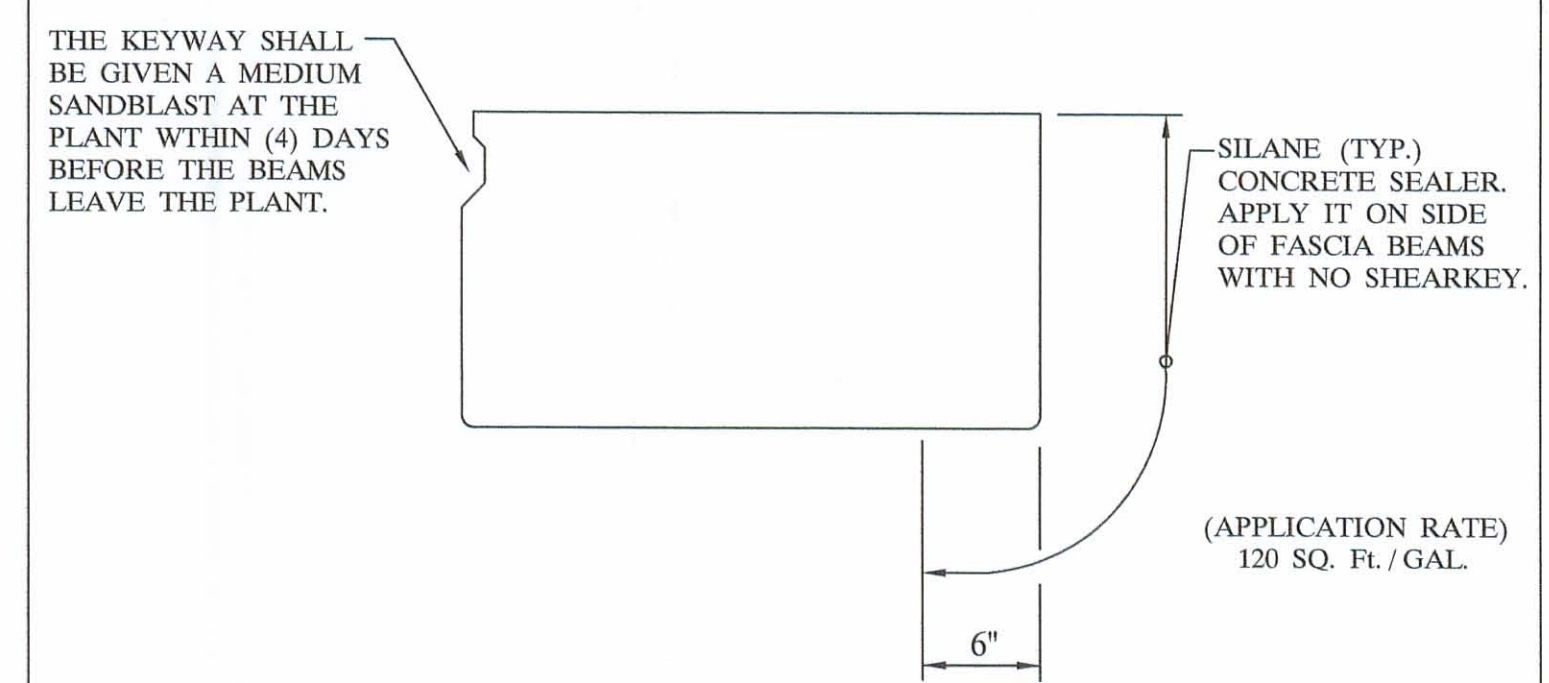


"B" & "C" ANCHOR DETAILS

SPECIFICATIONS

- ✓ DESIGN LOADING: HS20-44 AND ALTERNATE MILITARY LOADING.
- ✓ CONCRETE: COMPRESSIVE STRENGTH, $f_c = 5500$ PSI @ 28 DAYS (SHIPPING). $f_c = 4000$ PSI @ RELEASE.
- ✓ PRESTRESSING STRAND: ASTM A-416 GRADE 270, 1/2" DIAMETER, SEVEN WIRE, UNCOATED LOW RELAXATION STRAND, $A_s = .153$ in²; $f_s = 270$ KSI. INITIAL STRESS: $0.75 f_s = 202.5$ KSI.
- ✓ REINFORCING STEEL: GRADE - 60: ASTM A-615, ASTM A-616, ASTM A-617. UNIT STRESS 24,000 PSI.

NOTE:
PRESTRESSED CONCRETE BEAMS AND APPURTENANCES CONFORM TO O.D.O.T. STANDARD BRIDGE DRAWINGS PSBD-1-93 SHEETS ONE, TWO, THREE, & FOUR.



TYPICAL FASCIA BEAM

| | | | |
|---|------------------------|-----------------------|------------------------------|
| BRIDGE NO. LOG - 113 - 1.73 | | ITEM 515 | |
| LOGAN COUNTY | | PROJECT NO. C.R. 113 | |
| UNITED PRECAST INC. | | | |
| ROUNDHOUSE LANE MT. VERNON, OHIO 43050 PHONE: (740)393-1121, FAX: (740)393-0044 | | SCALE ----- | DRAWN BY: PHIL REVISED |
| DATE JAN. 2007 | APPROVED BY: E.O.C. | DRAWING NO. 3 OF 3 | |
| | | 2/1/07 | |

This drawing is the property of United Precast, Inc. or one of its affiliates and may contain information that is confidential or privileged. You are hereby notified that any disclosure, distribution or copying of the contents is prohibited without prior written consent from United Precast, Inc.